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Enzyme Kinetics Module (EKM) is a powerful addon for fast and easy generation of biochemistry-

related graphics and analysis that seamlessly integrates with SigmaPlot2000 (a Windows graphing program). With EKM, a researcher imports data, selects the type of study, and enters analytic details. The software then prepares a detailed report and makes model comparisons to assist in choosing the best-fitting model.

EKM is accessed through an option called Pharmacology on the SigmaPlot menu bar. There, three choices are available: Data Entry, Enzyme Kinetics, and Standard Curve. If Data Entry is chosen, an Enzyme Kinetics Data Entry Wizard offers a selection of the number of substrates for the system, the type of study, the maximum number of velocity replicates, and the method of data entry. After identifying independent and dependent variables, a user can transform the data with an equation, if desired. The last step is to enter the concentration information for the substrates and inhibitors, as well as the reaction rates. When this is done, the program can generate analyses and graphics.

The Standard Curve option offers a choice of a linear or four-parameter logistic equation curve. The Enzyme Kinetics Analysis option invokes a wizard that helps design several standard curves and select equations for fully or partially competitive kinetics and noncompetitive or uncompetitive inhibition. EKM provides standard Michaelis-Menton, Lineweaver-Burk, Scatchard, Dixon plots, and several others. Another feature ranks models according to goodness-of-fit. Other model evaluation choices include residual standard deviation and Aikake's Information Criterion.

Shortcomings of the program include slow operation on older machines (e.g., on a 166 MHz Pentium). EKM could also use a small manual, because the guides in the help section are not always easy to follow. A Quick Tour option in the online Help section will walk the novice through a sample analysis, but a more integrated treatment of theory and practice would be desirable. The Enzyme Kinetic Analysis and the Standard Curve options could al-

so be more smoothly integrated to eliminate backtracking. Lastly, accommodations should be made to tailor equations to specific circumstances without requiring programming.

Despite these minor drawbacks, the Enzyme Kinetic Module is a very useful, easy-to-use addition to SigmaPlot2000. The detailed nature of the program's reports and graphics, made possible by its use of complex enzymatic modeling systems, yields results far superior to that of any spreadsheet.

-JOHN A. WASS

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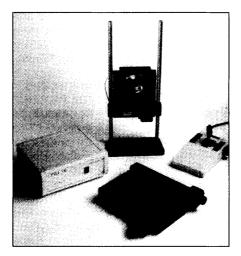
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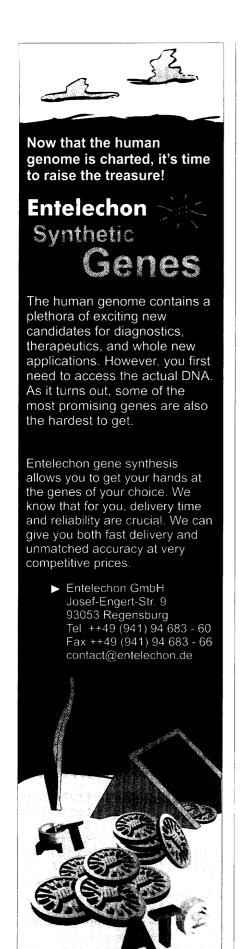
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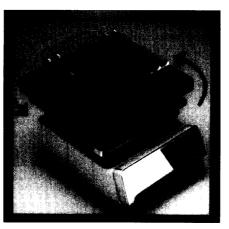
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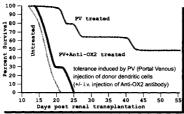
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1. R. Gorczynski et al., Transplantation 65, 1106 (1998) 2. R. Ragheb et al., Immunol. Lett. 68, 311 (1999) 3. R. Hoek et al., Science 290, 1768 (2000)

4. R. Gorczynski, personal communication **Ordering Information:**

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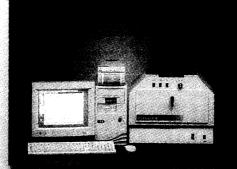
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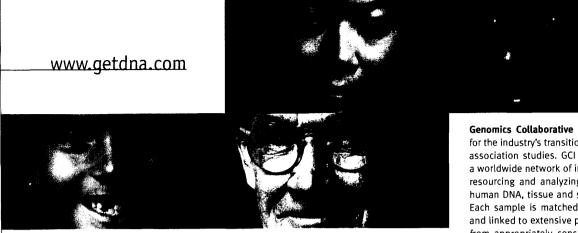
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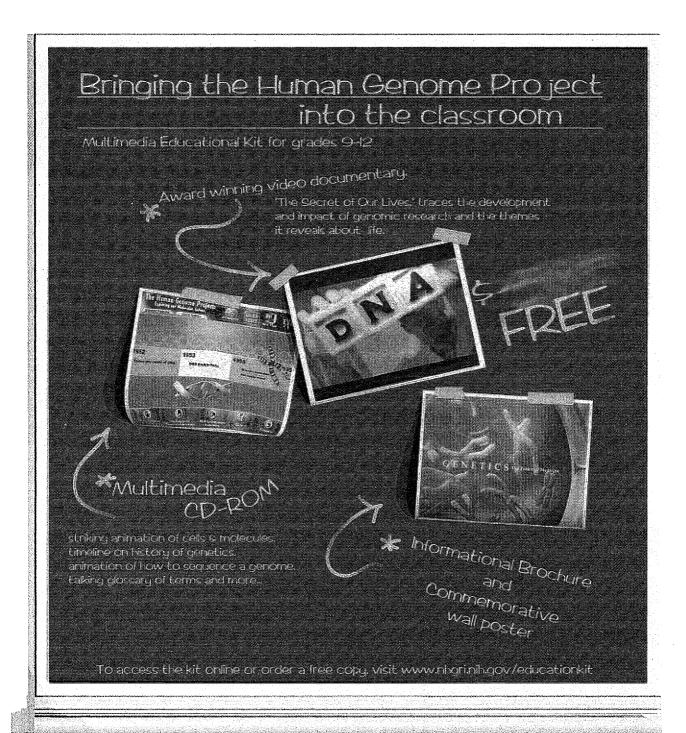
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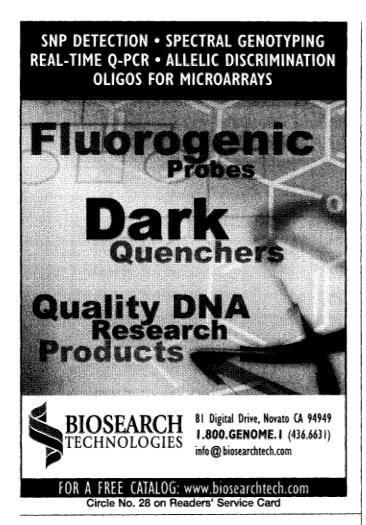
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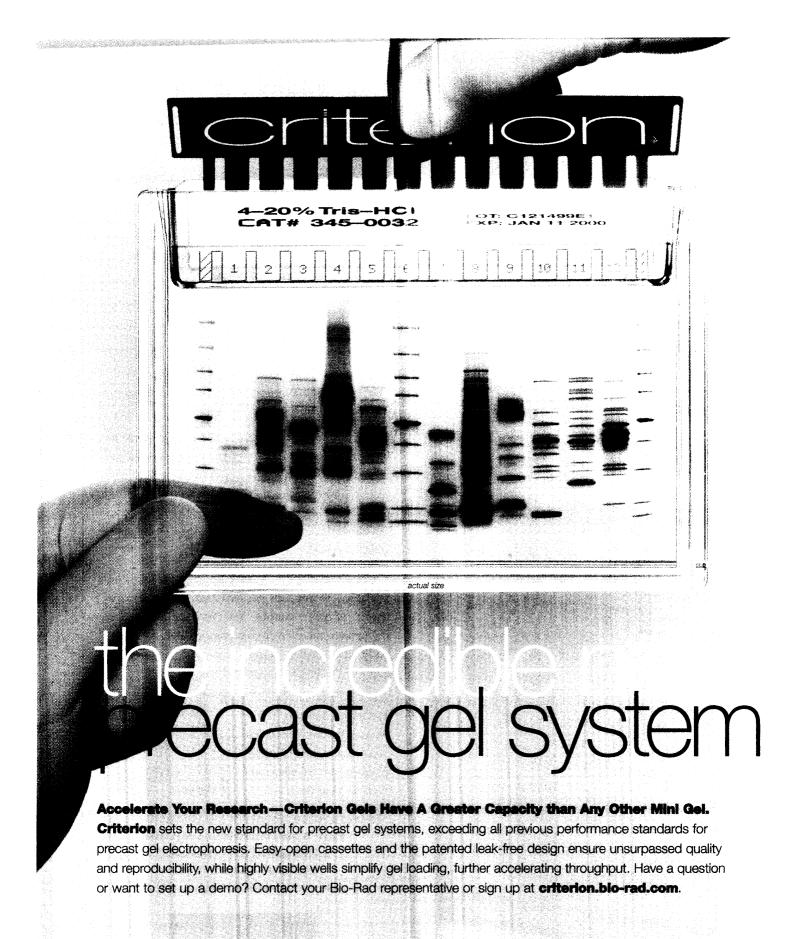
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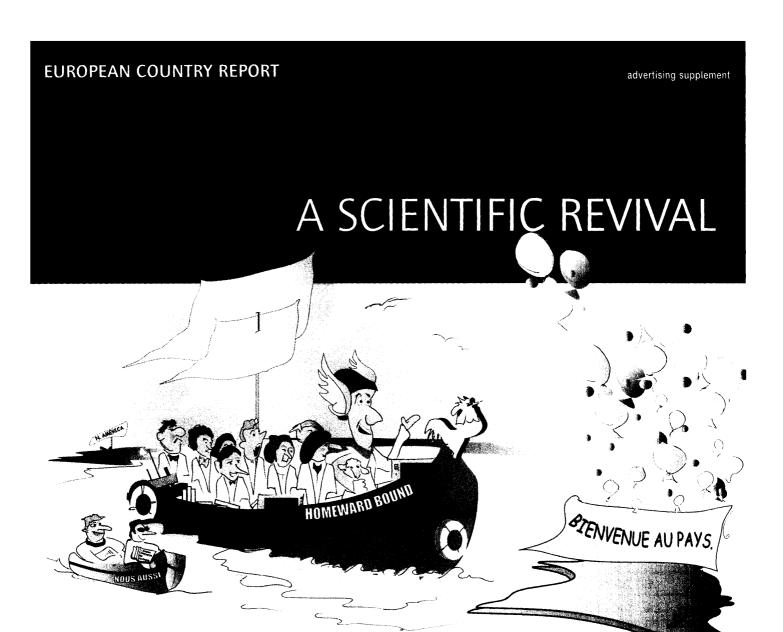
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The French government has stimulated a revival of public sector research by increasing budgets and opening new opportunities for young scientists. The result: a flood of emigrant French scientists returning to work in their homeland.

BY PETER GWYNNE **ILLUSTRATIONS BY MARGARET ROGERS**

Louis Pasteur. Marie and Pierre Curie. Marcel and Charles Mérieux. François Jacob, Andre Lwoff, and Jacques Monod. Jean Dausset. Jean-Marie Lehn. Luc Montagnier. France has a long tradition of producing extraordinary scientists and pioneering research, particularly in life science. The present government is continuing that tradition and more. Not only does it rank fourth in the world in the percentage of its gross domestic product that it devotes to R&D. It has also boosted the annual budgets of government agencies responsible for R&D by amounts up to 16 percent for 2001.

Those budget increases coincide with a new approach to public sector science. Over the years the French system of hiring scientists as civil servants, effectively giving them lifelong tenure and freedom

from "publish or perish" pressure, has given scientific groups the time to take a long-term view in their research. But it has also permitted a climate of lethargy in which senior researchers feel no obligation to produce results. Just as bad, the excessive weight of seniority encouraged by the system has forced several thousand junior scientists, frustrated by a lack of upward mobility, to move abroad to take up postdoctoral fellowships and jobs.

That is changing now. Several new initiatives have opened doors to young French scientists. Public and private sector institutions have started aggressive pursuits of foreign scientists, including American passport holders. Commercial biotechnology, itself a field representing much that is new in life science, is flowering as a result of government encourage-





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ment and support. And funders in the public and private sectors expect results. "We have to link our research efforts to more concrete objectives, specifically finding applications even in insect science," says Paul Brey, an American entomologist who traveled to France to study for his doctorate in 1979 and now heads his own laboratory in the nonprofit Institut Pasteur (the Pasteur Institute). "The public sector is definitely changing also. You can't get into your civil service position and stay there for the rest of your life without doing anything."

A STRONG FOUNDATION

For her size, France actually invests more in nonmilitary science than does the United States. The French government spends about 50 percent of the dollar amount the U.S. does on civilian research and development, though her population is about a quarter of the size. U.S. President Clinton's 2001 budget called for a 7 percent increase in civilian research spending, including a 4.5 percent increase for the National Institutes of Health. In comparison, France's 16 percent boost for medical research in 2001 looks generous.

In addition, nobody disputes that France does an excellent job in training life scientists. "French Ph.D.s perform at least as well as those from the United States," says Daniel Louvard, director of the research division at the nonprofit Institut Curie (the Curie Institute). Annette Doherty, vice president of research and site director of Pfizer's Fresnes Laboratories near Paris, agrees. "When I came here after working in the U.K. and the U.S., I was very impressed with the quality and level of scientist that France is training," she says.

Possibly as a result of the educational system, the French population shows great enthusiasm for science. A significantly larger percentage of the public reads popular science magazines in France than in other industrial nations. The glossy monthly *La Recherche*, for example, boasts 71,000 subscribers for its coverage of scientific research worldwide.

France also has a long-standing tradition of welcoming scientists from overseas. "We have postdoctoral programs for foreign scientists, and we give them the opportunity to join the civil service," says Jacqueline Godet, director of the life sciences division of the Centre National de la Recherche Scientifique (CNRS), the government organization responsible for pure scientific research. "We have many researchers from other European countries and a few Americans in our various scientific fields."

Paul Brey adds his own perspective. "We're seeing a lot of exchange from other countries," he says. "About 20 percent of our permanent staff at the Institut Pasteur are foreigners." Certainly the institutes named for Pasteur and Marie Curie have played key roles in attracting overseas researchers to France. And like the rest of the system, they have started their own reorganization to sharpen their chances of advancing biomedical research (see accompanying article).

CNRS and INSERM (the Institut National de la Santé et de la Recherche Médicale, which is the country's main biomedical research agency) have the most powerful positions in French science. In addition to funding R&D, both hire the scientists who work in universities and institutes connected with them. As soon as they are hired, those

scientists become civil servants; they share perks, privileges, lifetime employment, and relatively low pay with bureaucrats, postal workers, and other functionaries.

In theory, government scientists have a wide choice of locations. "Once you get a civil servant position, you are free to go from one lab to the next," explains Louvard. "The position is owned by the scientist, not the laboratory. The system is built to generate the possibility for mobility, both physical and intellectual." In practice, however, most scientists choose to stay in a single lab for most of their working lives.

TRADITION'S ADVANTAGES AND DISADVANTAGES

Ambitious scientists find that the traditional system gives them the time and the freedom to pursue long-term research projects that by their nature cannot churn out papers in respected journals every few months. "I believe that people should be encouraged to tackle difficult issues without the risk of being fired," says Louvard. Brey makes

a similar point. The traditional French system avoids "the risk of keeping only what is fashionable," he notes. "I think that there's a major danger that certain fields would be eliminated because they are not deemed interesting or seem unable to yield many results."

However, the system has also permitted less motivated individuals to spend decades on less than top-notch research without pressure to produce results. And it has closed off many opportunities to young French scientists. "In the past decade demand for jobs has far outweighed supply," says David Hicks, a British employee of INSERM who

runs a neuroscience group at the University of Strasbourg. "Scientists with cast iron CVs and papers in *Science* and *Nature* just haven't been able to get jobs."

Industry has taken up some of the slack. "We have absolutely no problem attracting scientists," says Jean-Yves Bonnefoy, general manager of the Pierre Fabre Center for Immunology (CIPF). "We can offer them much better salary packages and prospects for professional advancement than academic institutions. And we and others in the private sector have demonstrated that scientists can be as productive and creative here as in a government unit. There is no reason why a private sector scientist should not publish in *Science* and *Nature* and apply for a patent prior to publication."

Pfizer's Annette Doherty agrees that attracting good scientists is not a problem. "We can get really good scientists in all disciplines here," she says. "Between 1998 and 2000 we offered jobs to more than 100 scientists, many of whom had international experience."

The shortage of government-paid academic jobs for young scientists may be remedied somewhat in another way. Surveys suggest that a large proportion of French scientists will reach retirement age between 2004 and 2010. Those departures will open up positions for younger scientists, thus reversing the "graying of French science."

"RENOUVELLEMENT"

Nevertheless, the government has realized that the country must do more to attract and keep young scientists and to gain more than intellectual satisfaction from the funds that it devotes to science.

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Global Research & Development Fresnes Laboratories

Claude Allègre, Minister of Education and Research from 1996 until March 2000, set the scene by calling for a "renouvellement," or revival, of French government science. Roger-Gérard Schwartzenberg, Allègre's successor as Minister of Research, followed that lead by proposing significant increases in this year's budget.

Biology particularly benefits from the new budget. "Life sciences are now, more than ever, government's top priority in terms of research," Schwartzenberg explained. Overall, says CNRS's Jacqueline Godet, "The budget for life science will increase by 11.3 percent this year."

INSERM, the medically oriented branch of the research network, will receive the most spectacular increases. The institution will see this year's budget rise by 16 percent over the 2000 figure. The extra funds will permit INSERM to create 74 new research positions. The bulk of the new positions will focus on gene therapy, vaccines, psychiatric research, and epidemiology.

CNRS, meanwhile, will receive 9 percent more funding for scientific programs and 70 new research positions this year. The bulk of the newly hired scientists will focus on bioinformatics as academic French researchers, like their peers in industry and other countries, develop ways of processing the data gushing from genome projects.

Bioinformatics will also feature in the 2001 spending plans of the Institut National de Recherche en Informatique et Automatique (INRIA), an institute funded by both government and industry that focuses specifically on the applications of information technology to all types of science. INRIA plans to hire 300 new scientists this year, including 116 funded directly by the government. Its budget, both state- and self-generated, is expected to rise by 15 percent.

The increase in research positions promises to reverse the net emigration of promising scientists from France. For the first time in many years, the government can offer concrete jobs to French scientists who have traveled abroad to take up postdoctoral fellowships. "We have been sending mail and faxes and taking out advertisements to make all French postdocs in the U.S. know that there are many possibilities for jobs, especially in the life sciences," says Godet.

INSERM has gone a step further by making academic recruiters aware of potential recruits. "There used to be very little structure for finding out about postdocs who had gone abroad and wished to return," recalls David Hicks. "INSERM has now set up a website where you can find out about them."

The efforts are already producing results. CNRS has received several applications in response to its promotion in the U.S. And the Institut Curie has recruited 11 French nationals from foreign laboratories in recent years.

Research Minister Schwartzenberg outlined the new philosophy in a speech last month to the directors of INSERM's research units. The increases "should permit us from now on to recruit the most brilliant and best educated young people without obliging them to wait for years, causing us to risk losing the best," he said.

The government has also set up a new program that will have application across the scientific spectrum. Ground will be broken late this year in Saclay, about 12 miles from Paris, for the \$200 million SOLEIL

(or sun), a third-generation synchrotron. Canceled by Allègre and revived by Schwartzenberg, this producer of highly penetrating X-rays will permit scientists to probe the structures of biological molecules and industrial materials at extremely fine resolutions. The national government will share the machine's cost with regional local authorities. In addition, international contributions will come from the United Kingdom, Spain, Belgium, and Portugal. The government also expects pharmaceutical companies to help pay the synchrotron's way by using its facilities for molecular explorations related to drug discovery.

ENCOURAGING BIOTECHNOLOGY

The Ministry of Research has taken more concrete steps to encourage the growth of the country's fledgling biotechnology industry. The Ministry has announced that it will establish a new Institut National de Génomique this year. It will locate the national genomics institute at Evry, a city in the Ile-de-France region near Paris that has already

become a center for public and private sector research on human genetics and genomics. Several small biotechnology com-

panies have set up in Evry. And major pharmaceutical companies such as Aventis, GlaxoSmithKline, Merck, and Pfizer have located research centers there.

Serge Wolman, senior director, operations and public affairs at Pfizer's Fresnes Laboratories, points out the value of creating a special environment for biotechnology in Evry. "It gives us the opportunity to have our scientists work within the structure. We can discuss collaborative efforts," he says. "The Research Ministry has realized that there won't be any biotechnology research without the private sector."

In addition, the Research and Industry Ministries have launched a joint government-industry program called Après Séquençage Génomique (after genome sequencing). "This is to encourage the use of genomic information in helping a new generation of therapeutics or diagnostics," explains CIPF's Bonnefoy. "Academics are strongly encouraged to work with industry to help commercialize their research." Overall, he adds, "We see more money available for biotechnology start-ups in France. Structures are being set up in which small companies can start up around large academic centers."

Individual government institutes, which have been suspicious of industrial entanglements in the past, now support these ventures enthusiastically. "Research Minister Allègre put in a new law allowing academic researchers to work in start-ups," says CNRS's Godet. "Of course CNRS is willing to help in that direction as much as pos-

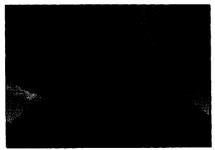
sible. Geneviève Berger, our new director general, is really keen to push it." Significantly, Berger is one of few scientists in the top echelon of French policy-making who has direct experience of successful commercialization of research.

Wolman sums up the ambition and achievement of France's current interest. "The

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Interested individuals may address their CV to: Dr. Jean Yves Bonnefoy, Managing Director: jean.yves.bonnefoy@pierre-fabre.com



4 POST-DOCTORAL POSITIONS TO WORK ON THE DEVELOPMENT OF LIVE-VIRUSES AS POTENTIAL VACCINE VECTORS

The candidates will work in the Genetic Engineering Department, on the generation of viral recombinants expressing heterologous antigens and will actively participate in pre-clinical studies to evaluate their efficacy as potential vaccine vectors.

Applicants must have a recent doctoral degree and experience in molecular biology / virology laboratory techniques. The candidates must be highly motivated with a strong interest in vaccinology. The nature of this project requires individuals capable of interacting simultaneously with a group of basic and clinical scientists that are focused on vaccine development.

The candidates will receive a European Commission (EC)-funded Marie Curie Industry Host Fellowship. All residents of EC Member States or Associate States, except France, are eligible. The age limit at the time of selection is 35 years-old.

1 STAFF SCIENTIST TO BE RESPONSIBLE FOR MASS SPECTROMETRY ANALYSES OF PROTEINS AND PEPTIDES

He/She will also handle preparation and treatment of acrylamide gels and blot membranes for HPLC, mass spectrometry and sequencing analyses.

Ph.D. in Biochemistry with 2 years experience in a proteomics environment is required, as well as strong experience in MALDI-TOF and LC-MS analyses of proteins.

The Physico-Chemistry Department is establishing a Proteomics Group that will be responsible for the discovery of new targets against cancer. This group will be part of our post-genomics effort, developing a new drug discovery technology platform for the identification of new therapeutic proteins to treat cancer.

These positions are available for a period of 2 years.

Regaining Momentum

In addition to the government and the private sector, French science has a prominent third leg: semiprivate foundations. Like the other two segments, these nongovernmental organizations are going through change.

The exemplar of the new approach is the Institut Pasteur, a private institution that specializes in research on infectious diseases. The institute's 2,500 staffers include research scientists and trainees from 62 countries. It receives about a third of its budget from the French government and the rest from private donations and revenues from licenses on its intellectual property. By the mid-1990s, like some government scientists, the Institute had lost momentum.

Enter Philippe Kourilsky, who had worked for CNRS and INSERM and is now a professor at the Collège de France. Appointed director of the institute on New Year's Day 2000, he immediately set out major changes in the way the institute was run. They included:

- Automatic reevaluation of the funding of the institute's individual laboratories after 12 years of operation.
- Creation of 10 new positions each year for young researchers, funded for five years. This has helped to persuade a high proportion of the thousands of promising young French scientists who have moved to the United States for



Philippe Kourilsky

postgraduate studies to return to France.

- More research partnerships with the private sector. Kourilsky sees private support and patents as keys to improving the institute's sagging income.
- Organization of an outside evaluation committee to review the institute's performance. "Nobody is going to be in a cocoon any more," comments Alain Gouyette, the institute's senior vice president of research, teaching, and public health.

Most important, Kourilsky has encouraged a breakdown of the traditional walls between disciplines, laboratories, and individual scientists. Today chemists, biochemists, molecular biologists, and physician researchers talk to each other and engage in collaborative research efforts in a way unthinkable even two years ago.

The aura of change is also plainly visible at the Institut Curie. Daniel Louvard, director of the institute's research division, has set up a new mechanism to overcome the lack of support for scientists early in their careers. "It gives young scientists a chance to get full support from the institute for five years, on condition that after those five years they should go into another department here or move out of the institute to fertilize other institutes in France," he says. "Over the past seven years as director, I have created 25 groups like this."

In the best French tradition the Institut Curie also aims to stimulate international exchange at all levels. "We have a program for scientists on sabbatical," says Louvard. "We regularly host senior scientists from the rest of the world for four to nine months in the institute. During that time they participate in the institute's scientific life via teaching and collaborative research. And we currently host about 100 postdoctoral fellows coming from more than 20 different countries."

government has a strong will to support biotechnology," he says. "France is already top in patent applications, and the Ile-de-France region is third worldwide in the field, behind only California and New York." Overall, the region has become Europe's top employer in the R&D sector with more than 110,000 jobs. "We are starting to get the first fruits of the political decisions," adds Godet. "We have more and more biotechnology start-ups."

Bonnefoy sees evidence that academic scientists have become aware of the need to think commercially. "At last," he says, "French scientists in academe are taking very seriously the question of filing patents. That has not previously been a tradition, but now it's moving in the right direction. If you're an industrialist working with academic partners, you want to make sure that the partner has obtained intellectual property rights."

By contrast with the growth in the biotechnology sector, employment in the French pharmaceutical industry has remained largely stable in recent years. The main reason has been the rash

of consolidations among the industry's major players worldwide.

But while some mergers have led to temporary freezes in the number of research jobs available in pharmas, the situation in France now shows signs of changing. "The large pharmas are beginning to recruit again," says Michelle Dorey, human resources director at Pfizer's Fresnes Laboratories. "After last year's big merger [with Warner-Lambert] our head count stabilized. Now we are beginning to have new opportunities."

Plainly the winds of change are blowing throughout life science in France. The nation has a long tradition of excellence in research on cancer, infectious diseases, and neurodegenerative conditions. The recent changes in science policy should expand French influence on biomedical research and development. "We can have added value for the scientific and health science communities," says CIPF's Jean-Yves Bonnefoy. "France has a useful card to play in finding functions for genes and the ways in which genes interact; we are very well trained for this. And the changes are not simply words. They are concrete actions and programs."



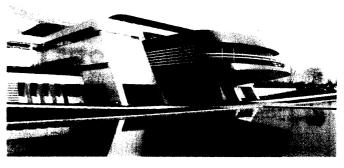
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- designing and mastering automatic control for complex systems
- ▶ combining simulation and virtual reality



INRIA Rhône-Alpes, one of the 5 research units, is focusing, as the other INRIA labs, on the following IT applications: biology and healthcare, telecommunications and multimedia.

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Genomic and Structural Biology Opportunities At Top European Center

The structural biology facilities operated jointly by the EMBL Grenoble Outstation and the European Synchrotron Radiation Facility (ESRF), Europe's 3rd generation X-ray source, will provide a number of opportunities for research in the field of structural genomics. These opportunities include the development of protein expression and crystallisation protocols, of automated high throughput beam lines and associated automatic methods of macromolecular structure solution.

There are openings for scientists and post-doctoral fellows throughout the year to participate in new developments, undertake in-house research and operate and maintain the beamlines dedicated to structural biology. PhD positions are also available. Fluent English is required for all positions.



The ESRF in the French Alps.

Parties directly interested in genomics and structural biology should contact either Dr. Sean McSweeney (mcsweeney@esrf.fr) or Dr. Stephen Cusack (cusack@embl-grenoble.fr) for further information.

General information about EMBL Grenoble outstation and the ESRF can be found on the websites:

- www.embl-grenoble.fr and
- www.esrf.fr

For specific information on work opportunities, send an e-mail to recruitm@esfr.fr or a fax to +33(0)4 76 88 24 60.

Grenoble, France





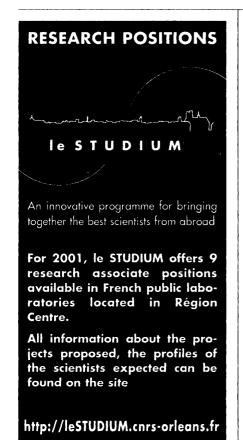
Research Jobs in Physics and Chemistry

The Department of Fundamental Research on Condensed Matter (DRFMC), a laboratory of the French Atomic Energy Commission (CEA), is located in Grenoble, France. At the DRFMC, a permanent staff of 400 people (150 researchers and 70 PhD students) are working in fields that range from the advancement of basic knowledge in condensed matter physics and chemistry to applications in new materials, new technologies and biology. The laboratory consists of five groups: Physics of Materials and Microstructures, Magnetism, Superconductivity and Statistical Physics, Interfaces, Molecules and Molecular Materials, Inorganic and Biological Chemistry, Low Temperatures.

The DRFMC is currently inviting applications for six permanent research positions. All these positions require a PhD or equivalent qualification, and candidates with postdoctoral experience would normally be preferred.

- 1. Experimental mesoscopic physics (Sept 2001). The project is oriented towards sub-100 nm MOSFET and SOI devices. In a group of six researchers, the appointee will design and fabricate silicon nano-objects for studies in the physics and the detailed mechanisms of charging and interference effects.
- 2. Epitaxial growth of nitride semiconductors (June 2001). Molecular Beam Epitaxy of GaN/AlN multilayers, quantum wells and quantum dots and their characterisation by X-rays, electron microscopy, AFM, optics. The appointee will join a team of six persons working on a UV laser project. Experience in epitaxy required, knowledge of semiconductor and laser physics would be an advantage.
- 3. Spectroscopy of silicon nanostructures (Sept 2001). Development and interpretation of spectroscopic experiments on semiconductor nanostructures, quantum wells and quantum dots within a twelve person team, with a view to silicon based photonic devices. A candidate with confirmed experience in semiconductor physics is sought.
- 4. Transport properties of ionic organic conductor membranes (June 2001). The appointee will join a team of five persons working on fuel cell applications. Properties of diffusion under concentration or pressure gradients will be measured using techniques such as NMR, EPR, spin echos, neutron diffraction. The candidate should be a physicochemist with knowledge of polymers, diffusion mechanisms in heterogeneous solutions and spectroscopic techniques.
- 5. Magnetism of strongly correlated electronic systems (Dec 2001). Development and interpretation of high pressure, low temperature experiments with synchrotron (ESRF) and neutron (ILL) facilities. A candidate with confirmed experience in high pressure X-ray or neutron scattering is sought.
- 6. Theory in condensed matter physics (Jan 2002). The appointee should have a confirmed experience in statistical physics. A knowledge in magnetism and/or superconductivity would be an advantage, as well as an interest in mesoscopic physics.

A letter of application with CV, list of publications, at least two referees' names and addresses, should be sent to: A. Chamberod - DRFMC-CEA-Grenoble - 38054 GRENOBLE cedex 9 - France. Tél 33 476 88 34 98 - Fax 33 476 88 51 53 - Mail: chamber@drfmc.ceng.cea.fr



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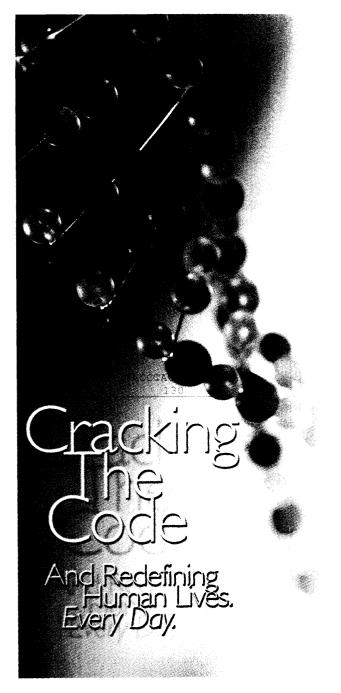
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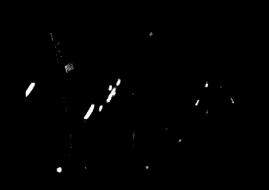
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Director, Medicinal Chemistry

The successful candidate will be responsible for the design and implementation of drug discovery chemistry operations, which exploit Lexicon's novel therapeutic targets. Candidates should have at least five years post doctoral experience in medicinal chemistry, preferably in a pharmaceutical industry environment. The position requires proven managerial skills, excellent written and verbal communication and a precise intellectual approach combined with a strong appetite for innovation.

Director, High Throughput Screening

The successful candidate will be responsible for the design and implementation of drug discovery screening operations, which exploit Lexicon's novel therapeutic targets. Candidates should have at least five years post doctoral experience in cell and enzyme based high throughput screening techniques, including first-hand knowledge of relevant robotic and computing systems, preferably in a pharmaceutical industry environment. The position requires proven managerial skills, excellent written and verbal communication and a precise intellectual approach combined with a strong appetite for innovation.

Director, Pre-Clinical Development

Lexicon seeks to engage a highly experienced Director of Pre Clinical Development to accelerate the introduction of novel therapeutics to the clinic. Qualified individuals will have M.D./Ph.D. credentials and at least five years post doctoral experience in pharmaceutical pre clinical development. Proven managerial skills, close familiarity with regulatory considerations and a strong appetite for innovation are required.





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Scientists - Gene Transfer

We are seeking Ph.D. scientists to explore gene transfer technologies for defining gene function and discovering drug targets. The successful candidates will design and prepare vectors for in vivo gene transfer and participate in multiple exciting discovery projects. Requirements include a Ph.D. in either Molecular Biology or Virology and 2-5 years post-doctoral experience in a related field. Preference will be given to candidates with experience in viral vector construction (e.g., Adenovirus, AAV), gene regulation, TagMan PCR,



cDNA library construction, and protein purification. You must have good communication skills and work effectively in a team environment.

Scientists - Molecular Genetics

Positions are available immediately for experienced scientists to participate in our efforts to define gene function using targeted mutagenesis in embryonic stem (ES) cells. Requirements include a Ph.D. in Molecular Biology or related field, 3 years post-doctoral experience, and proven expertise in the field of gene targeting with skills including DNA manipulation, genomic library screening, targeting vector construction, genomic Southern, PCR, and sequence analysis. Excellent communication skills, a willingness to train and supervise technicians, and the ability to manage multiple projects within defined timelines are required.

Scientist - Immunology

Areas of interest and background include cellular, molecular, or developmental immunology. Preference will be given to candidates with experience in mouse immunology, FACS analysis, and signal transduction techniques.

Scientist - Neuroanatomy

A position is available immediately for a Neuroanatomist with experience in molecular biology. The candidate will examine the effects of gene knockouts on the structure of the nervous system, and make and Lexicon Genetics employees enjoy a pleasant work environment in test hypotheses about primary vs. secondary structural changes as well as hypotheses about anatomical substrates of behavioral phenotypes. The successful candidate will have a Ph.D. with at least 3 years of postdoctoral experience in all aspects of neuroanatomical research, with a strong appreciation of molecular biological aims and procedures. The candidate will have strong skills in all phases of in situ hybridization and be amenable to automated, higher-throughput methodologies as well as careful, detailed analysis. Experience with the structural aspects of human disease is a plus. A team orientation and good communication skills are vital.

experience in murine behavior to work with other scientists in the behavioral characterization of knockout animals. The candidate will examine the effects of gene knockouts using behavioral assays, make and test hypotheses about primary vs. secondary changes, as well as hypotheses about the anatomical/physiological substrates of these behavioral phenotypes. The successful candidate will have a Ph.D. with at least 3 years of postdoctoral experience in all aspects of behavioral research, including many of the assays used to predict efficacy on human disease. Extensive experiences in developmental behavior, epileptogenesis, or sleep disorders are a plus. A team orientation and good communication skills are vital.

Scientists - HTS Bioassay Development

We seek highly qualified candidates to bolster the efforts of our bioassay development group to design and implement screens of Lexicon's functionally validated drug targets. Direct experience in an industrial setting with functional assays to detect secondary messengers as well as a working knowledge of the design, instrumentation, and implementation of HTS assays in general is required. Successful candidates will possess a Ph.D., be team oriented, and have the ability to adroitly manage multiple projects simultaneously. Excellent communication skills, supervisory experience, and familiarity with data-handling bioinformatics tools are also desired. Please include Job Code HTS on your cover letter.

Scientists - Bioinformatics

Requirements call for a Ph.D. in computer science or molecular biology with extensive training in bioinformatics such as scientific programming, sequence data mining and analysis, scientific software development, database and/or web programming. The position will consist of developing custom scientific software for Lexicon's drug discovery efforts in the Bioinformatics group and interacting with scientists on a regular basis to meet their needs in software development and support.

Web/Database Development

Candidates should have 2+ years professional experience developing web-based software. We are seeking candidates with web and relational database programming experience to develop and maintain software for our internet and extranet web sites. PHP programming is a plus.

Scientific Programming

Candidates must possess an MS in computer science or equivalent practical experience with a track record of software development in a scientific context. Knowledge of Molecular Biology, Bioinformatics tools and/or database experience and Web programming is a plus.

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- Bioinformatics Opportunities -

Bioinformatics Software Developer
Key member of the Bioinformatics team is needed to develop applications for use by scientists within Syngenta to support their ongoing research projects. Selected candidate will be involved in the design and development of in house Bioinformatics software solutions. This will require applying professional software development methodology in the design, development, troubleshooting and debugging of enduser software in a highly cooperative environment working with a multi-disciplinary team. This position will require interacting with scientists from Gene Expression, Proteomics, Metabolite Dynamics and Sequencing technologies. Experience working with data generated by at least one of these technologies and a working knowledge of the associated tools in use in the public domain is necessary. The candidate will be responsible for understanding the nature and needs of the user community, and developing appropriate requirement specifications for needed software solutions. The candidate will be involved in developing software solutions arising from these specifications as well as providing appropriate training and support for their use. Qualifications include a BS/MS or equivalent in Computer Science, Life Sciences or related fields with 3+ years' software development experience. A minimum of 3 years demonstrated experience developing software using Java (Servlets, Swing, EJB), Relational Databases (Oracle preferred) and XML. Ability to work in a team environment, excellent communication skills, both written and verbal are required as well as excellent knowledge of Bioinformatics tools and data. Knowledge of Java Enterprise Computing and statistics a plus. Job Code: BSD/HV-SCI

Bioinformatics Associate

Seeking a member for the functional genomics team to be responsible for organizing and evaluating biological data for the purpose of data mining. Requires a BS in Molecular Biology, Computer Science or a related field. At least 1 year experience in the bioinformatics arena. Experience with Java or PERL, as well as sequence analysis tools, is also required. An understanding of biological processes and experimental biology techniques is preferred. Excellent communication and interpersonal skills and ability to work in a team environment are essential. Job Code: BA/GP-SCI

- Consumer Health Opportunities -

Postdoctoral Associate - Gene Discovery

Incumbents will conduct gene discovery research in transcriptional control of plant gene expression using a combined transcription profiling and reverse genetics approach. Resp. include analyzing gene expression data generated by microarray technology and maintaining collaborative links with other laboratories. Candidates should have a Ph.D. in Plant Molecular Biology, Genetics or related field and knowledge in molecular biology and genetics of transcriptional control. Job Code: PAGD/XG-SCI

Postdoctoral Associate - Functional Genomics

Position available second quarter 2001 to discover genes for seed quality improvement. Responsibilities include utilizing genomic tools (proteomics and microarray RNA profiling technology) to identify genes from unique germplasm and mutant lines, and to develop methods to further investigate applications of the genes. Candidate should have a Ph.D. in Plant Molecular Biology, Biochemistry or Plant Physiology. Strong background in seed physiology and bioinformatics experience preferred. Job Code: PAFG/WS-SCI

Postdoctoral Associate - Structural Biology

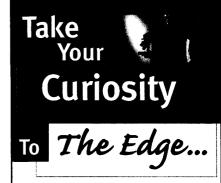
Position available in the Consumer Health Department to conduct cutting edge research in 3-D structure determination of membrane proteins using a novel expression platform. Opportunity to interact with leading scientists and develop collaborative projects in the areas of bioinformatics, gene technology, proteomics, RNA dynamics, plant biology and human / animal health and nutrition. Experience in crystallization of membrane proteins and the modern tools of molecular biology is essential. Job Code: PDA/PH-SCI

- Proteomics and Metabolomics Opportunities -

Postdoctoral Associate - Metabolism Dynamics

The successful applicant in this position will work toward developing new separation technology combined with mass spectrometry for determining primary and secondary cellular metabolite profiles. Available instrumentation will include a Micromass GC-TOF, Thermo-Finnigan TSQ, Thermo-Finnigan Quantum and a Thermo-Finnigan Polaris-Q. Candidates should have a Ph.D. in Chemistry (preferably Analytical Chemistry) or Biochemistry with computer skills. Computer programming capability will be considered a plus. This position requires someone who is highly motivated, works well in a group research environment and yet can operate independently. Job Code: PD/TM-SCI

Syngenta offers excellent compensation and a great benefits package, including 401(k) with match and immediate vesting. For confidential consideration, please send cover letter indicating position of interest and resume including salary history and expectations to: Syngenta Agricultural Discovery, Inc., Attn: HR/Lob Code), 3115 Meryfield Row, San Diego, CA 92121-1102. Fax: (858) 812-1096. EOE syngenta



...with Pharmacia Corporation. Success in drug discovery and development has always relied upon the efficient capture, organization and analysis of large quantities of data. With the enormous increases of data now being generated in the context of public and private genome projects, the task of managing biologic data has increased almost exponentially. In order to compete in this increasingly competitive environment, the modern pharmaceutical company needs to incorporate and integrate gene sequence data, gene polymorphism data, gene expression data as well as proteomics data, together with cutting edge analysis tools into its R&D efforts, not only in the context of new target discovery, but to support the development of products in the clinic. Pharmacia therefore believes that a significant strength in Bioinformatics is a critical component for the successful delivery of high quality therapeutics in the next Millennium.

Critical mass is a vitally important component in achieving strength in a research environment. For this reason Pharmacia is establishing a Global Bioinformatics organization that will be responsible for supporting its research activities at all locations. Although the staff within this organization will be distributed at all sites, the Bioinformatics organization will be integrated with respect to databases, analytical tools and research strategies. In order to fully realize the potential of a globally integrated Bioinformatics organization, Pharmacia recognizes the need for strong leadership. Therefore, we are requesting applications for the position of Director of Bioinformatics.

DIRECTOR OF BIOINFORMATICS

The successful candidate will take responsibility for building and running the global Bioinformatics organization (research activities are currently based at Kalamazoo, St. Louis, South San Francisco and Nerviano, Italy). Applicants must have a strong vision for the role of computational biology in pharmaceutical research, excellent management skills, and a track record of designing and building computational biology systems including the development of algorithms for data analysis in some or all of the following areas: gene sequence analysis, gene expression profiling, protein functional assignment, pathway mapping and pharmacogenetics.

Your efforts will be rewarded with generous compensation and benefits. You may submit a resume by our preferred method of responseat:http//respond.webhire.com/ job/id?479-r1840-J1. Or FAX, indicating Ad Code #00-1840/Science Magazine, to: 520-287-0963. Pharmacia Corporation is an equal opportunity employer, we value a diverse combination of ideas, perspectives, and cultures. EEO/AA EMPLOYER M/F/D/V





Engineering Cures Through Genes

CuraGen's rapid growth has created exceptional career opportunities. We have openings for individuals with backgrounds in molecular biology, biochemistry, engineering, bioinformatics and medicine. Successful CuraGen employees are exceptionally well organized, have an entrepreneurial spirit, a passion for their work, and thrive in a challenging team environment. We are currently seeking highly driven individuals for the following positions:

Vice President/ Internal Discovery

Vice President/ Pharmacogenomics

Director/Proteomics Director/Pharmacology Medical Director/ Regulatory Affairs & Clinical Development Director/ CNS Disorders
Director/ Business Development
Regulatory Director/ Regulatory Affairs & Clinical
Development

Group Leader/ Genetics
Group Leader/ Protein Expression

Group Leader/ In Vitro Validation
Group Leader/ Cardiovascular Disease Program

Project Leader/ Bioinformatics Project Manager/ Regulatory Affairs & Clinical Development Senior Research Engineer/ Technology Development

We have openings for Research Scientists in the following departments:

Pharmacogenomics
Protein Purification
Cell Biology & Drug Development
Bioinformatics
Inflammation & Autoimmunity
Gene Discovery & Pharmaceutical Collaborations
Molecular Biology

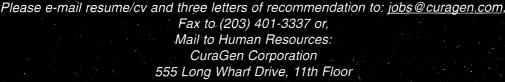
CNS Disorders
Database Mining
Proteomics
Metabolic Disorders
Pharmacogenetics
Life Sciences Collaborations
Oncology

Technology Development: Molecular Methods, Cell Assay Screening, and Proteomics Therapeutic Proteins: cDNA Analysis, Transcriptome Analysis, and Genomic Analysis

We have openings for Research Associates in the following departments:

Protein Purification Inflammation & Autoimmunity Engineering

Cell Biology Oncology Operations



New Haven, CT 06511

Visit us at www.curagen.com. EOE.

Paradigm Therapeutics



Turning Genome Sequence into Validated Drug Targets

Paradigm Therapeutics Ltd is a young, privately held functional genomics company dedicated to the discovery and validation of novel human drug targets. Located in Cambridge, we emerged from University funded research and maintain strong academic links. PT's focus on the discovery of genes encoding "drugable" proteins integrated with in vivo mammalian validation through expression and gene knockout analysis places the company in a strong position to exploit the growing field of genome based drug discovery.

This is an exciting opportunity to join a dynamic and growing biotechnology company that offers competitive remuneration packages.

We have a Senior Bioinformatician position available immediately. The postholder will contribute to the bioinformatics strategies of the company, which include genome database mining, data analysis and archiving and will be responsible for both technical implementation of bioinformatic tools and bioinformatic data analysis. Experience with Unix/Linux systems and practical experience of Perl/C/C++ development are essential. Additional experience with Bioperl, Java and HTML is desirable as is some background in biological sciences, especially genetics or genomics related.

We seek a Senior Scientist with experience of team leadership to direct a number of our research teams (according to experience). This postholder will be responsible for the implementation of the gene analysis and validation pipeline and should be willing to participate in strategy development. Preference will be given to candidates that have worked with genes encoding "drugable" proteins (GPCRs, ion channels, transporters etc). The senior bioinformatician and senior scientist will have the opportunity to contribute to PT's overall strategic focus.

In addition we have positions available for highly motivated Research Scientists, with significant postdoctoral or industrial experience and Technicians, to expand our teams in the following areas: Molecular Biology, applicants should have experience of PCR, cloning and expression analysis; Protein Biochemistry, experience in recombinant expression in eukaryotic cell lines, protein purification and detection required; Gene Targeting/Transgenics, candidates should have experience of cell culture, preferably of ES cells, and ideally would be familiar with manipulation of mouse embryos and the generation and husbandry of transgenic mouse lines although training will be offered; Physiological Analysis, applicants should be familiar with phenotypic analysis of mouse lines or have experience of mammalian systems physiology.

Informal enquiries to Mark Carlton (markcarlton@paradigm-therapeutics.co.uk). To apply please send your CV (by email or post) to: Dr. M. Carlton, Paradigm Therapeutics Ltd., Physiological Laboratories, Downing Street, CAMBRIDGE, UK, CB2 3EG.

Tel/Fax: +44 1223 333841. http://www.paradigm-therapeutics.co.uk. Closing date Feb 28th.

Join the Ambion Team!

We are seeking to fill key positions in business development, R&D and manufacturing to build a strong team to address our rapidly growing business needs.

Senior Research Scientists (Job #273 & 274)

We are seeking talented individuals with experience related to any aspect of technologies related to RNA. You should have a Ph.D. in molecular biology, biochemistry, or related field with at least two years of postdoctoral experience, a strong publication record and excellent verbal and written skills. Most importantly, we are searching for entrepreneurial scientists who are stimulated by practicing science in a unique research environment that rewards creative thinking and making things happen.

Business Development Professionals (Job #272)

The Ambion RNA Diagnostics Division seeks creative, highenergy product scientists to advance Ambion's solid RNA technology platforms and create opportunities in the molecular diagnostics industry. You will be responsible for establishing and maintaining dynamic collaborative relationships, creating a solid business reputation, and identifying RNA-product opportunities in the clinical laboratory. A Ph.D. in molecular biology or related field coupled with a diverse background in molecular diagnostics is highly desirable.

Production Associates (Jobs #275 & 276)

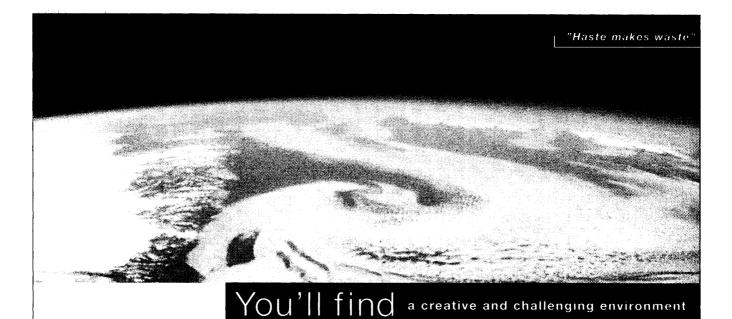
Ambion seeks talented scientists to lead the production of products in the areas of RNA-stabilization and isolation, and RNA" controls and standards. A BS in molecular biology or related field, MS or Ph.D. preferred and strong experience in RNA related techniques are required. The individual must have strong interpersonal skills, and solid experience manufacturing products in a regulated environment (cGMP).

Visit www.ambion.com/jobs for position descriptions.

Ambion is a rapidly growing biotechnology company that focuses on applications related to RNA. It is located in Austin, the state capital, on the edge of the "Texas Hill Country", which provides rivers, lakes, scenic rolling hills and a comfortable climate. Austin is home to the main campus of the University of Texas and offers an exciting array of restaurants, music and cultural events. Austin is widely recognized as one of America's most livable cities.

We offer a stimulating work environment, competitive salary and benefits, 401(K) plan, employee stock option and bonus plans. Equal Opportunity Employer. M/F/D/V





We're looking for

section head of In Vitro Pharmacology [Södertälje]

Discovery at AstraZeneca R&D Södertälje, Sweden, is a complete unit with a staff of more than 250 researchers. Discovery research is carried out at our main site in Södertälje, as well as in Novum Research Park at Huddinge University Hospital. AstraZeneca has recently announced a new R&D Strategy to further strengthen AstraZeneca R&D Södertälje as a Center of Excellence in Drug Discovery for analgesia and neurological disorders.

The Bioscience Department is currently seeking an in vitro pharmacologist with a strong background in pain or neurology research to lead the In Vitro Pharmacology Section.

The responsibility of the section is to develop and optimize in vitro disease models to provide detailed characterization of the interaction of compounds with selected molecular targets, and to study the actions of compounds on defined pathways.

The In Vitro Pharmacology Section is organized into four research teams - Intracellular pathways and enzymes, Electrophysiology, Neurodegeneration and Immunoassays. The research conducted by the teams is project oriented, and is integrated with other sections within the Bioscience Department and other functions within the Discovery organization, particularly with HTS hit and lead identification.

The successful candidate holds a Ph. D. and has a solid scientific background in pharmacology and preferentially electrophysiology. A skill in one or several of the section's other research areas is also desirable. The candidate will also have experience from leading successful research teams in either the pharmaceutical industry or in academia. A high degree of networking skills as well as an ability to motivate and generate enthusiasm is essential. The In Vitro Section Head has the responsibility for the staff and the operations of the section and is a member of the Management Team of the Department. For further information, please contact Johan Luthman +46 8 553 285 38.

Please send your application marked "Section Head - In Vitro Pharm." no later than March 11 to: Hannes Vedin, B213, AstraZeneca R&D, 151 85 Södertälje, Sweden, e-mail: hannes.vedin@astrazeneca.com.

Further information regarding this and other available jobs can be found on our website. You can also e-mail your application:

www.astrazeneca.se



AstraZeneca is one of the world's leading pharmaceutical companies with approximately 50,000 employees. In Sweden, about 10,000 people work for the company in pharmaceutical research, production and marketing.





SCIENTIFIC CURATORS

Our expanding Mouse Genome Informatics program currently has Scientific Curator positions available to work with the Mouse Genome Database, Gene Expression Database, Mouse Genome Sequence Project and the Gene Ontology Project. Successful candidates will be primarily responsible for data acquisition and analysis, evaluating and annotating data to be incorporated into the databases, integrating information from disparate sources, and interacting with research laboratories and genome centers to facilitate data transfer. In addition, Curators take part in database and interface design by contributing biological perspectives to new data content and displays. Areas of preferred expertise include mammalian or comparative genomics, molecular, cellular, or developmental biology, anatomy, sequence analysis, and biochemistry. Other desirable attributes include excellent writing/communication skills and the ability to work effectively in a team environment. Ph.D. degree in Life Sciences or M.S. with appropriate experience required.

The Jackson Laboratory is one of the world's foremost centers for mammalian genetics research. Located in Bar Harbor, Maine, the lab is adjacent to Acadia National Park. Mountains, ocean, forests, lakes, and trails are all within walking distance.

If you love high tech challenges but are looking for a more natural environment, this could be the opportunity you've been searching for.

Interested applicants should send cover letter and cv to:

Human Resources, The Jackson Laboratory, 600 Main Street, Bar Harbor, Maine 04609 Phone: (207) 288-6103 • Fax: (207) 288-6106 • E-mail: jobs@jax.org

The Jackson Laboratory is an Equal Opportunity/Affirmative Action Employer.

http://www.jax.org

THE CENTER FOR GENOMICS RESEARCH



The Center for Genomics Research (CGR) was launched in 1997 as a new academic department at Karolinska Institutet. The department has since then been growing rapidly and now hosts over 100 researchers in the fields of functional, clinical and structural genomics as well as genomics technologies and bioinformatics. Each unit consists of several research groups that are interconnected in various projects. The newest addition is in structural genomics. The structural genomics unit analyses protein families at the structural level. This work will focus on unclassified protein families and receptor signalling systems in human disease. Primary tasks include comparative modelling, interaction hot-spot/active site ID and analysis as well as virtual screening/docking. Experimental template structures are generated in collaboration with leading Protein Crystallography and NMR based laboratories.

The CGR provides a unique interface between academic and pharmaceutical research since many projects are carried out in close collaboration with Pharmacia Corporation.

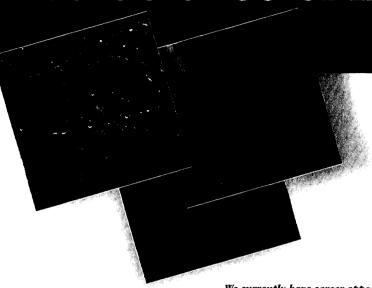
CGR scientists are also noted for running widely used core facilities and for developing international databases (pertaining to, e.g., human genes, protein domains, single nucleotide polymorphisms and antisense oligonucleotides).

Highly accomplished group leaders have been and are still recruited internationally. For group leader positions, please contact Claes.Wahlestedt@cgr.ki.se, Professor and Chairman of the CGR.

There are currently openings also for postdoctoral fellows interested in working in the field of functional and structural genomics as well as in bioinformatics. In structural genomics we are looking for scientists with experience in Structure Based Drug Design and/or Computational Science/Biology. We also have PostDoc positions available in the areas of Protein Biochemistry, Structure Determination and Structural Bioinformatics and analysis. For further information about the openings, please contact Claes.Wahlestedt@cgr.ki.se (functional genomics), Michael.Sundstrom@cgr.ki.se (structural genomics) or Erik.Sonnhammer@cgr.ki.se (bioinformatics).

For further information see our web page at www.cgr.ki.se

The Science of Innovation



We currently have career opportunities in the following areas:

Regeneron is a biopharmaceutical company that discovers, develops, and intends to commercialize therapeutic drugs for the treatment of serious medical conditions. Our platform technologies include Targeted GenomicsTM, FunctionomicsTM, and Designer Protein TherapeuticsTM. In addition to our rich product pipeline, we have cutting-edge basic discovery research programs focused on areas such as: muscle, bone, cartilage, fibrosis, genomics, cytokines, inflammation, and angiogenesis.

Regeneron is a company founded on the belief that talented scientists with the right resources can achieve outstanding results. We are dedicated to finding the most highly qualified individuals and providing them with a creative, energetic environment where new ideas and innovation can flourish.

Due to our unprecedented growth, we have a number of open positions throughout our organization. To learn more about Regeneron's remarkable projects and these extraordinary opportunities, as well as to view specific position requirements, visit www.regeneron.com.

To apply please submit your resume, referencing appropriate Web site job code, to:

Regeneron Pharmaceuticals, Inc.

777 Old Saw Mill River Road,
Tarrytown, NY 10591
Fax: (914) 345-7790
E-mail (text or .pdf format only): jobs@regpba.com.
EOE. M/F/D/V.

SCIENTISTS

Genomics & Bioinformatics
Transgenics
Pharmacologist
Angiogenesis
Formulation/Preclinical Development
Protein Chemistry
GPCRs
Gene Targeting

RESEARCH ASSOCIATES

Neural and Endocrine Biology
Genomics & Bioinformatics
Transgenic Technology
Tissue Culture
Protein Sciences
Formulation/Preclinical Development
Biomolecular Sciences
Muscle Biology
RNA Core Facility
Angiogenesis

PROGRAM MANAGEMENT

Program Coordinator Manager, Licenses & Contracts Technology Transfer Administrator

CLINICAL AFFAIRS/ SCIENCES

Medical Program Coordinator Clinical Rheumatologist/Immunologist Clinical Programmer/Analyst

PILOT PLANT/ MANUFACTURING

Engineer
Manufacturing Research Associates
Microbiologist

ADDITIONAL OPPORTUNITIES

Vice President, Investor Relations Systems Administrator Recruiter Buyer Facilities Assistant Administrative Assistant

Quality Auditor

REGENERON

Pharmaceuticals, Inc.

www.regeneron.com

It's what we do. It's who we are.

Employment opportunities in New Jersey

Merck Research Laboratories, a world leader in Biological and Pharmaceutical Research, attracts scientists who are on the cutting edge of modern biomedical, genetic, chemical, and scientific discoveries and have an unwavering dedication to research.

The Molecular Systems group is seeking creative, self-motivated individuals with exceptional interpersonal and problem solving skills to join our expanding scientific team in Rahway, New Jersey.

SENIOR MOLECULAR MODELERS

APPLICATIONS MODELER

The successful candidate will be responsible for the design and optimization of novel drug candidates using advanced computational techniques. In addition to participating in Merck's medicinal chemistry and biology programs, the applicant will be expected to continue research in new areas of molecular modeling relevant to the drug discovery and development process. PAF Code: XHXMRSMJP02041

ADME MODELER

The successful candidate will develop and utilize computational methods to model ADME properties. Skills in one or more of the following areas are an asset: analysis of drug metabolism, absorption, or pharmacokinetics data, pharmacophore generation, data and knowledge-base mining, protein sequence/structure analysis, homology modeling, protein-ligand docking and design, or combinatorial library design. Programming experience is highly desirable. PAF Code: XHXMRSMJP02042

Candidates must have a Ph.D. in Chemistry, Biochemistry, Biophysics or equivalent. Strong communication skills along with the ability to work well in multidisciplinary teams are essential. Evidence of creative application of computational approaches to problems of biological or chemical interest is necessary.

ASSOCIATE MOLECULAR MODELERS

Working closely with a Senior Molecular Modeler, the successful candidate will participate in Merck's medicinal chemistry and biology programs by assisting in the design and optimization of novel drug candidates using computational techniques. Additionally, the applicant will be encouraged to continue developing scientifically toward the goal of becoming an independent researcher. PAF Code: XHXMRSMJP02043

Candidates must have a M.S./B.S. or equivalent in Chemistry, Biochemistry, or Biophysics. Some familiarity with molecular modeling software and experience using computational approaches to solve chemical or biological systems-related problems are desirable.

We offer an excellent salary and comprehensive benefits program, including tuition reimbursement and one of the best 401(k) plans in the nation, as well as opportunities for personal growth. Please submit your resume and a cover letter indicating salary requirements to: Merck Positions, P.O. Box 92164, Los Angeles, CA 90009-2164. E-mail: merck@resume.isearch.com Fax: (310) 337-3393. Please include PAF code in correspondence. Only candidates considered for interviews will receive responses. No phone or agency calls please. We are an Equal Opportunity Employer, M/F/D/V.





Staten Island University Hospital, a progressive state-of-the-art teaching facility, has challenging and exciting opportunities for the following positions:

Research Associates

BS in Biology or Molecular Biology, and at least 2-3 years' cell culture Immunotherapy, Immuno assays and blood separation, stem cell collection and culture experience required.

Post Doctorate Research Fellow

Ph.D. or MD to join newly developed program in gene therapy for Parkinson's disease. Experience in the ex vivo manipulation and cellular engineering of human cells, gene expression system, transfection, transduction and rat models of PD preferred.

We offer competitive salaries and outstanding benefits. For consideration, please email, fax or send your resume and salary requirements, indicating position of interest, to: Human Resources, Staten Island University Hospital, 475 Seaview Avenue, Staten Island, NY 10305. Fax: (718) 226-8255; Email: ellen_mufti@sluh.edu. We are an equal opportunity employer with a smoke free environment.



FACULTY POSITIONS

Bioinformatics

The University of Medicine and Dentistry of New Jersey (UMDNJ) invites applications for multiple doctoral level faculty positions in the field of bioinformatics. Successful applicants will be expected to establish a strong research program in computational analysis of nucleic acid sequences, proteomics, gene expression, drug design, molecular structure, statistical interpretation of bioinformatics analyses, or other biomedical areas that include a substantial bioinformatics component. Primary appointments will be made in a relevant department at the Newark or Piscataway campuses, primarily at NJ Medical School or Robert Wood Johnson Medical School, with teaching responsibilities in a university-wide bioinformatics graduate program. Preference will be given to appointments at the Assistant Professor level, although applications from more senior scientists also will be considered.

The UMDNJ campuses offer modern computer & research facilities to support research in molecular biology, genomics, proteomics, microarray chip technologies, & related areas. Cooperative educational & research programs exist with neighboring academic institutions & affiliated Centers of Excellence. Additional information on UMDNJ is available on the University's web site http://www.umdnj.edu. Research activities of the graduate faculty can be found at the Graduate School of Biomedical Sciences web site http://gsbs.umdnj.edu.

Please send curriculum vitae, a statement of research interests & 3 reference letters to: Dr. Henry Brezenoff, UMDNJ-Graduate School of Biomedical Sciences, 30 Bergen St., Suite 110, Newark, NJ 07107-3000. The UMDNJ is an Affirmative Action/ Equal Opportunity Employer M/F/D/V & a member of the University Health System of New Jersey.



Van Andel Research Institute

Postdoctoral Fellowships, Senior Research Technician, Senior Research Scientist

Van Andel Research Institute, an independent organization dedicated to becoming one of the world's pre-eminent private medical research institutes by building on the extraordinary discoveries in molecular biology and genetics, is inviting applications for the laboratory of Dr. Sara Courtneidge, who joined the Institute in February 2001.

The research in her laboratory will focus on understanding the role of tyrosine kinases in signal transduction pathways controlling processes such as growth and motility. Projects include:

- Using a new Src-selective inhibitor to study the role of Src family kinases in the response to growth factors
- The characterization of several recently identified, novel, Src substrates
- The function of a novel cytoplasmic tyrosine kinase
- Elucidation of how Src impacts the p53 pathway
- Evaluation of the functions of Src family kinases in signal transduction pathways in both normal and tumorigenic epithelial cells
- Using animal models to elucidate the role of Src in tumorigenesis

Applications for Post-Doctoral Fellowships are invited from highly motivated individuals with a strong commitment to a career in research. Fellowships are awarded on an equal opportunity basis to recent recipients of a Ph.D., M.D., or an equivalent degree/expertise in cell biology, biochemistry and/or molecular biology.

Applications for Senior Research Technician and Senior Research Scientist positions are invited from individuals who are interested in participating in the above ongoing research activities as well as assuming responsibility for maintaining an inventory of laboratory reagents and requisitioning supplies. Qualified candidates will have a B.S., M.S., or Ph.D. degree in the biological or biochemical sciences and five or more years of relevant laboratory experience.

Visit www.vai.org to learn more about the Institute.

We offer highly competitive salaries with full benefit packages. To apply, send a letter describing your research interests, curriculum vitae, together with the names and addresses of three references to:

> Dr. Sara Courtneidge, Deputy Director Van Andel Research Institute 333 Bostwick N.E. Grand Rapids, MI 49503

Informal inquiries may be sent to: Sara.Courtneidge@vai.org

An Equal Opportunity Employer



The Van Andel Research Institute

Human Cancer Genetics Assistant or Associate Professor The Ohio State University

The Division of Human Cancer Genetics has an immediate opening for a tenure-track position at the Assistant or Associate Professor level. Candidates should have a Ph.D. and/or M.D. degree, postdoctoral experience, and a strong commitment to cancer genetic research. Experience and background in cancer genetics, cancer predisposition, and/or animal models will be important. The individual will be responsible for the support and maintenance of an independent research program in cancer genetics as well as cooperative research with other principal investigators engaged in several aspects of human genetics with an emphasis on cancer.

The Human Cancer Genetics Program is rapidly expanding under the leadership of Dr. Albert de la Chapelle, and contains both basic and clinical components. The program is affiliated with the Comprehensive Cancer Center and the Arthur G. James Cancer Hospital and Solove Research Institute and the Department of Molecular Virology, Immunology, and Medical Genetics. The Ohio State University campus includes an NIH-funded Comprehensive Cancer Center, the College of Medicine and Public Health, the nearby College of Biological Sciences, and other colleges with comprehensive undergraduate and graduate programs.

Applications should include a detailed curriculum vitae, a description of research experience and a statement concerning the nature of the planned independent research program. Information about the University and the Division of Human Cancer Genetics can be obtained by contacting our web sites (http://www.osu.edu and http://www.cancergenetics.med.ohio-state.edu).

Application materials should be sent to:

Brad Harris 646 Medical Research Facility 420 West 12th Avenue Columbus, Ohio 43210

The Ohio State University is an equal opportunity/affirmative action employer. Qualified women, minorities, Vietnam era veterans and individuals with disabilities are encouraged to apply.

GER Global Environmental Research at UC Davis

Opportunities for Postdoctoral Researchers

The Research Institute of Innovative Technology for the Earth (RITE) seeks postdoctoral researchers with training in molecular genetics, enzymology, biochemistry, and microbiology. RITE, a non-profit organization, was formed to find practical methods for alleviating the burden put on the environment since the Industrial Revolution. RITE is currently supporting research at the UC Davis Department of Molecular & Cellular Biology in order to study specific areas of interest such as the efficient conversion of biomass to sugars by genetically engineered enzymes and microorganisms; also, basic research on cell division focused mainly in Corynebacterium. Successful applicants can expect to have a 2-3 year tenure with RITE. Salary: \$30,000 per annum or more depending on experience. To apply, submit curriculum vitae, any publications, and 3 letters of reference to:

> Dr. Hideaki Yukawa and Dr. Roy H. Doi Section of Molecular & Cellular Biology University of California, Davis Davis, CA 95616

The information can be e-mailed to hyukawa@ucdavis.edu and rhdoi@ucdavis.edu

For further information and future opportunities, please visit our website at www.gsk.com



Become part of a cutting edge research team...

Virginia Bioinformatics Institute

The Virginia Bioinformatics Institute (VBI) at Virginia Polytechnic Institute and State University is assembling a large team of highly motivated faculty and support personnel.

We are seeking individuals who work collaboratively to solve complex biological problems, and who have demonstrated an ability to successfully compete for major sources of research funding. We are recruiting faculty for research track positions with very competitive compensation packages. Some tenure track appointments may be offered for exceptionally qualified candidates, in liaison with appropriate academic departments of the university. We also are recruiting graduate students and professional staff, including research programmers, and laboratory directors and technicians.

Virginia Tech is a top 50 research university with strengths in engineering, information technology, and biotechnology. Our proximity to Washington, DC, and federal agencies is a major advantage, as is our anticipated connection to the new high-speed internet. The university has created an environment encouraging entrepreneurship, with a liberal intellectual properties policy (50% royalties to inventor) and with the Virginia Tech Corporate Research Park in close proximity to campus.

Faculty

If you are a faculty candidate with a research focus in bioinformatics, computational biology, genomics, functional genomics, or proteomics, please send us your CV accompanied by a statement of your research and career plans. We are seeking candidates from any relevant background in the life sciences, physical sciences, computer science, engineering, statistics or mathematics.

Post-Doctoral Research Associates

Independent, highly motivated post-doctoral candidates will be selected to carry out research programs supervised by VBI faculty. Please send a CV accompanied by a one- to two-page statement of your research plan, and a brief statement of your training and resource needs.

Apply:

Dr. Bruno Sobral, Director Virginia Bioinformatics Institute Screening Committee

1750 Kraft Drive, Suite 1100 Corporate Research Center Blacksburg, VA 24061

Office: (540) 231-2100 **Fax:** (540) 231-1777

Email: bioinfo@vt.edu http://www.vbi.vt.edu/

Electronic Documents in Adobe PDF or Microsoft RTF format are acceptable.

Research Programmers

We are seeking experienced programmes with a background in database development, mathematical modeling, or scientific software development, a background or interest in natural sciences, and the desire to work in collaboration with scientists to solve complete esearch problems. Please send a resume detailing relevant experience and programming expertise.

Virginia Tech has a strong commitment to the principal of diversity and, in that surit, seek a broad spectrum of candidates including women, minorities, and people with disabilities. Individuals with disabilities desiring accommodations in the application process should natify Celia Hardwick, Virginia Bioinformatics Institute, (540) 231-2100 or call the Virginia Telecommunications Relay Service at (800) 828-1120.



VIRGINIA POLYTECTIN CINSTITUT AND STATE UTIL ERSITY

Providing Innovative Technologies

To Help All People Live Healthy Lives

We look beyond research into real life applications. At BD Technologies, we'll give you the power to implement your ideas and realize the applications of your work.

Scientist, Advanced Cellular Sciences

This position in Advanced Cellular Sciences will be responsible for arraying of proteins on polymeric substrates. The candidate will have specific knowledge of bioconjugation chemistry, background in organic and/or biomaterial/polymer chemistry and a working knowledge of cell biology.

Requires a Ph.D. in Chemistry with 2 years' experience in Biomedical Science or related field. Understanding of biomaterials and cell biology would be a plus.

Research Associate, Advanced Cellular Sciences

This position in Advanced Cellular Sciences will be responsible for conducting cell-based assays to monitor cell growth and differentiation. Incumbent will apply cell biology, molecular biology and biochemical approaches to monitor cell morphology and intracellular events.

Requires B.S. or M.S. in Cell Biology or related field with 2-4 years' laboratory experience after graduation as well as exceptional laboratory skills in the areas of cell culture, cell-based assays and molecular technique. Experience in flow cytometry and cellular imaging is preferred. A background in developing cell-based assays using reporter systems and knowledge of developmental biology will be particularly useful.

We provide competitive salaries and comprehensive benefits. Please forward your resume to: BD Technologies, 21 Davis Dr., P.O. Box 12016, Research Triangle Park, NC 27709; or e-mail to: BDThr@bd.com Becton Dickinson is an equal opportunity/affirmative action employer.

Visit our web site at www.bd.com



DNA MICROCHIPS

PharmaSeq, Inc., a fast-paced, well-funded biotech company, is developing rapid, light-powered microchip-based DNA fluorometric technologies and needs talented people for our Engineering and Microarray Genomics Teams. Benefit from cutting-edge technology & a dynamic work environment in a company with great potential! We received a substantial equity investment from a major international company & our company is growing! We currently seek engineers, scientists, research associates and team

We currently seek engineers, scientists, research associates and tear leaders (B.S., M.S. and Ph.D. level) in the following areas:

Electrical Engineering

(RF, IC Design, Systems and Instrumentation Design)

MEMS and BioMEMS

Flow Flurometry and Microfluidics

Polymer Chemistry

Organic Synthesis & DNA Chemistry Molecular Blology

People with managerial experience are also encouraged to contact us. For more information about these job opportunities, go to our web site, www.pharmaseq.com.

PharmaSeq is located on U.S. Route 1 in the NJ high-tech corridor near Princeton, minutes from Princeton University and Rutgers. We offer a competitive compensation package, including benefits and stock options. Become a part of the recent dramatic growth in the gene tools business!

Send your resume with cover letter in strict confidence to: Job Code S4 PharmaSeq, Inc., 11 Deer Park Drive, Suite 204 Monmouth Junction, NJ 08852. Fax: (732) 355-0102 Email: murphy@pharmaseq.com

PHARMASEQ

SCIENTIST/ SR. SCIENTIST

SEATTLE

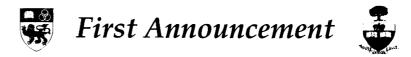
ZymoGenetics, Inc. is a targeted bioinformatics-driven company dedicated to the discovery and development of novel therapeutic agents used in the treatment and prevention of human ill-

ness. ZymoGenetics' successful track record of protein discovery and genetic engineering place it among the leading biotech companies. We are currently seeking a Scientist/Sr. Scientist to join our In-Vivo Biology group at our headquarters in Seattle's historic Lake Union Steam Plant.

The successful candidate will conduct pharmacology and toxicology experiments, coordinate the contracting out of GLP experiments in pharmacology and toxicology and be familiar with In-Vivo techniques. Qualified candidates will possess a Ph.D. in Pharmacology or Toxicology, a minimum of 5 years postdoctoral experience and be a board-certified toxicologist. Experience with protein therapeutics is a plus.

We offer intellectual challenge, state-of-the-art facilities and a generous benefits package in a growth-oriented environment. For confidential consideration, send your resume and cover letter to ZymoGenetics, Human Resources - Job #42N400, 1201 Eastlake Avenue East, Seattle, WA 98102; Fax: (206) 442-6658; E-mail: jobs@zgi.com. We are an equal opportunity employer and encourage applications from women and minorities.

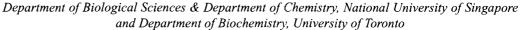
ZYMO GENETICS



International Conference on Fundamental Sciences: Biological and Chemical Sciences

21-24 May 2001 Singapore

organised by





Background

The last century has experienced vast scientific and technological advances, which have affected almost every facet of our everyday existence. There have been tremendous advances in our understanding of the fundamental nature of the Universe, in particular, in areas like chemistry, biology, life sciences, mathematics and physics. At the same time, knowledge and advances of a fundamental nature form the basis for cutting-edge technology and are being applied in a myriad of innovative and often surprising ways to more downstream technological applications as well as a plethora of seemingly unrelated problems. With the dawn of a new millennium, it is appropriate at this juncture to gather the leading researchers in basic sciences in the world to look back at the achievements made and to discuss new ideas and trends in basic sciences.

Conference Objectives

- To reflect on the significant scientific developments in life sciences;
- To discuss new ideas and trends as we move into the 21st century;
- 3. To promote interest in these basic sciences among secondary and tertiary students and the general public.

Conference Themes & Speakers

Cell Growth, Disease and

Drug Design

Confirmed Speakers

Bob Tjian, University of California, Berkeley David Ho, Rockefeller University

John Ellman, University of California, Berkeley

Li Peng, Institute of Molecular and Cell Biology, Singapore

2. Genomics Lap-Chee Tsui, University of Toronto

Doug Wallace, Emory University

Edison Liu, National Cancer Institute, USA John H. Postlethwait, University of Oregon

Emerging Technologies Paul Matsudaira, MIT

Peter Dervan, California Institute of Technology

Richard Simpson, Ludwig Institute for Cancer Research, Australia

4. Biomolecular Structure and Function Peter Wright, Scripps Research Institute

> Lynn Regan, Yale University Mike James, University of Alberta Emil Pai, University of Toronto

Jacqueline Barton, California Institute of Technology

Call for Papers & Registration

We are now inviting all interested parties to submit abstracts for poster presentation. The deadline for abstract submission is 31 March 2001. Registration fee before 15 April 2001 is US\$200 (S\$340) and after the deadline, US\$240 (S\$400).

Please access our Conference Website for more information: www.chembio.science.nus.edu.sg

CAREER DEVELOPMENT FELLOWSHIPS IN TRANSLATIONAL CANCER RESEARCH

UNIVERSITY OF PITTSBURGH CANCER INSTITUTE

The University of Pittsburgh Cancer Institute (UPCI) announces a unique four year training program in translational cancer research with Career Development Fellowships beginning in Summer, 2001. This innovative NCI funded program offers talented young biomedical researchers an interdisciplinary didactic curriculum leading to a M.P.H. degree, collaborative research training experience, and dual mentored career development, including submission of a K22 NCI Transition Career Award application, to prepare them for independent faculty level positions.

The training program faculty is comprised of 27 members of the UPCI, an NCI-designated Comprehensive Cancer Center with established multidisciplinary programs in basic, translational and clinical research. Program training will be concentrated within the recently funded NCI Early Detection Research Network Biomarkers Developmental Laboratory (EDRN/BDL) of the UPCI.

Individuals with or without previous postdoctoral experience are eligible to apply. Fellows will receive an initial stipend of \$37,500 with annual \$1,000 increases, fringe benefits and health insurance, full support for tuition and textbooks, research supplies, and travel to scientific meetings. Candidates must be U.S. citizens or Permanent Residents; have completed a Ph.D., M.D./Ph.D. in a basic/biomedical science, or Pharm. D.; demonstrate a high level of interest in earning a M.P.H. degree; and career commitment to translational cancer research in an interdisciplinary collaborative environment. Interested candidates should submit a curriculum vitae, graduate transcripts, at least two letters of support from the candidate's previous mentors, and a statement of research goals by April 1 to: William L. Bigbee, Ph.D., Director, University of Pittsburgh Cancer Institute, Biomedical Science Tower W953, 200 Lothrop Street, Pittsburgh, PA 15213. E-mail: bigbeewl@msx.upmc.edu. For a full description of the training program, faculty, and the UPCI please see our website: http://www.upci.upmc.edu/Internet/research/news/cecd.html.

The University of Pittsburgh is an affirmative action, equal opportunity institution.



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latest technology,

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has remained a

leader in the

ever-changing

pharmaceutical

industry. And with

over a century of

innovation and

ingenuity behind us,

we are poised to face

the challenges of the

new millenium

The Bioinformatics Group is an integrated part of our programs in discovery of new medicines utilizing state-of-the-art genomics and genetics technologies. Building on cutting-edge information management technologies, we are involved in large-scale data analysis and support of individual discovery projects. Currently, we're seeking a Bioinformatics Scientist to join our Preclinical R&D and Bioinformatics Departments at our headquarters in Nutley, New Jersey.

BIOINFORMATICS SCIENTIST

You will support our Scientists in their therapeutic areas and Genomics in their discovery efforts by contributing to the design and implementation of genomic information and knowledge management systems. The successful candidate will have 2+ years of postdoctorate experience in Bioinformatics/Genomics in addition to excellent verbal and written communication skills and the ability to work as a member of a diverse team. Familiarity with a broad range of genomics platform technologies and pharmaceutical industry experience are highly desirable.

Hoffmann-La Roche Inc. offers competitive salaries and an outstanding benefits package that includes on-site childcare, a variety of employee services, and fitness center. For consideration, please send your resume referencing Job Code AD010131FM with salary requirements to: Roche Pharmaceuticals, Human Resources Bldg. 123/5, 340 Kingsland Street, Nutley, NJ 07110. You may fax your resume to: (973) 235-2767 or email to: nutley.research@roche.com. We appreciate your interest in Hoffmann-La Roche Inc., but can only respond to qualified candidates. We are an equal opportunity employer, fully committed to diversity in the workplace.







Human Applications Laboratory Positions Available

St. Jude Children's Research Hospital, located in Memphis, TN, is a world renowned research institution dedicated to the treatment of childhood catastrophic diseases. The Transplantation and Gene Therapy Program focuses on the development of novel therapies for childhood cancer and genetic diseases. Supporting this program is a state of the art Hurman Applications Laboratory, operated to current Good Manufacturing (cGMP) standards. Individual laboratory sections include Stern Cell Processing Laboratory, Cell Culture Laboratory and Transduction Laboratory.

We are seeking highly talented individuals to staff our rapidly expanding program. Current open positions include:

Cell Culture Specialist (Job Code: SCI-3918VH) Stem Cell Processor (Job Code: SCI-1950VH)

For more information on these and other opportunities at St. Jude, visit our web site at www.stiude.org/hr

St. Jude Children's Research Hospital offers an excellent salary and fringe benefits package and will cover the cost of interview travel as well as provide relocation assistance. For more information or to submit a resume contact St. Jude Children's Research Hospital, Human Resources Department - (Job Code), 332 North Lauderdale, Memphis, TN 38105. Fax: 901-495-3123. E-mail: research.careers@stjude.org



An equal opportunity employer.

New Initiative: Therapeutics in Genetics and Molecular Medicine

National Human Genome Research Institute

The National Human Genome Research Institute (NHGRI) is launching a new initiative in Therapeutics in Genetics and Molecular Medicine. The Institute is seeking innovative scientists for positions at the Assistant through the Professor level within the Division of Intramural Research, NHGRI. Our major goal is to identify outstanding M.D., Ph.D., or M.D./Ph.D. investigators to direct vigorous basic and/or clinical research programs in such areas as:

- Gene therapy
- Transplantation
- Biochemical Genetics
- Proteomics
- Therapies for Mendellan or complex disorders

- Genome analysis
- Bioinformatics
- Stem cell biology
- Developmental Biology
- · Gene transfer/Gene correction

We are interested in physician-scientists whose programs within NHGRI will include clinical research with paulants as well as researchers whose efforts will be exclusively laboratory-based. In both cases, we are vely seeding investigators whose programs have the potential to lead to innovative approaches to

These fully funded tenure-track or tenured positions include start-up allowance, ongoing resource commitment of laboratory space, supply budget, and positions for support personnel and post-doctoral follows. In addition, each candidate will have ready access to both the NIH Clinical Center for patient-oriented investigation and the state-of-the-art NHGRI core facilities for transgenic and ES mouse work, cytogenetics, fluorescent and confocal microscopy, flow cytometry, large-scale sequencing, microarray technology, and computational biology and genomics.

Clinical Director

In addition, we are seeking a leader in clinical genetic research to augment an active clinical genetics program and interact with clinical and basic science faculty at the NHGRI. We are looking for candidates (M.D. or M.D/Ph.D.) who can develop and implement a vision that affects future clinical initiatives in Therapeutics in Genetics and Molecular Medicine at the NIH. This fully funded tenure eligible position includes start-up allowance, ongoing commitment of clinical and laboratory resources, and positions for support personnel and trainees.

The NIH is an equal opportunity employer and encourages applications from women and minorities. Interested applicants should send a cumculum vitae and a description of their proposed research plan to:

NHGRI Joint Search Committee c/o Ms. Debbie Wilson Building 49, Room 4A22 49 Convent Drive Bethesda, MD 20892-4470 Fach candidate should also arrange to have three letters of recommendation sent to the same address.

The closing date for the position is April 15, 2001.



For more information, see http://www.nhgri.nih.gov/Intramural_research

ASSISTANT PROFESSOR RESEARCH, NON-TENURE TRACK OF PHARMACOLOGY AND TOXICOLOGY

An outstanding individual is sought for a non-tenure track assistant professor position available summer/fall 2001 to work with the research group of Dr. James R. Halpert at the University of Texas Medical Branch at Galveston (UTMB). The successful candidate will participate in NIH-funded projects on cytochrome P450 structure-function and help coordinate the activities of 6-8 other group members. Ongoing projects include substrate specificity and cooperativity of P450 3A enzymes, design of selective P450 inhibitors, molecular modeling and structural biology of P450s, and P450 engineering. Once established, the faculty member will have the opportunity to pursue independent projects and seek extramural funding and/or participate in teaching, if so desired. The technical and intellectual resources of a number of core facilities and centers of excellence are readily available, including the NIEHS Center, Sealy Center for Environmental Health and Medicine, Sealy Center for Structural Biology, and Membrane Protein Laboratory.

A Ph.D. in biochemistry, molecular biology, pharmacology, chemistry, or a related field along with two years of post-doctoral experience are required. The doctoral or post-doctoral work should be related to cytochromes P450, protein structure-function, or drug metabolism. Strong writing and organizational skills are also required. The position offers the possibility of stable, long-term employment or may provide the additional experience required to transition to an independent faculty position. The Department of Pharmacology and Toxicology is undergoing dynamic growth and development with the recent recruitment of five assistant professors in molecular toxicology, cancer pharmacology, and neuropharmacology, and provides an excellent environment for career development. The position offers a competitive salary and benefits package.

Review of applications will begin on March 5 and will continue until the position is filled. All applications should contain the following materials: current curriculum vitae and list of publications, concise statement (≤ 3 pages) of research accomplishments and future plans, names and contact information on three references. Please submit to: Dr. James Halpert, Professor and Chairman, Department of Pharmacology and Toxicology, 301 University Blvd., The University of Texas Medical Branch, Galveston, TX 77555-1031. UTMB is an EO/AA Employer, M/F/D/V.





The R.W. Johnson Pharmaceutical Research Institute, located in suburban Philadelphia, conducts pharmaceutical research and development in therapeutic areas including anti-infectives, central nervous system, diabetes, hematology/oncology, immunology/inflammation, women's health, and wound healing.

Postdoctoral Fellowship MorphoMetrics, Drug Discovery

The candidate we seek will have the opportunity to work in a new, exciting and rapidly evolving area of drug discovery. Responsibility of the core project is to assess the role of pericytes in a range of pathologic conditions, such as wound healing and cell metastasis. Additional responsibilities include supporting the projects of the MorphoMetrics laboratory employing microscopic approaches to characterize novel nucleic acids and proteins in tissues and cells in a range of projects encompassing Alzheimer's disease, neuropathic pain and inflammation.

The candidate must have a Ph.D. in Cell Biology, Pathology or a related discipline with a proficiency in cell and tissue, structure and function, as well as expertise in microscopy staining techniques, such as immunohistochemistry and in situ hybridization. Excellent written/verbal communication skills and the ability to work independently, are a must. In addition to offering many publication opportunities, we encourage and invite collaboration within the Company, as well as with academic laboratories.

To the selected candidate we'll provide an interactive and enthusiastic environment. As a valued team member, you'll receive a competitive salary and great benefits including medical/dental, a 401(k), a pension plan and a comprehensive wellness program. Please apply directly on-line at our web site www.jnj.com or forward a scannable resume, noting operating company as R.W. Johnson Pharmaceutical Research Institute and Req. Code 003932SCI, to: Johnson & Johnson Recruiting, P.O. Box 16597, New Brunswick, NJ 08906-6597. Please note, resumes received electronically via jnj.com are reviewed within 24 hours. Mailed resumes are reviewed within 3 business days after receipt. We are an equal opportunity employer totally committed to diversity.

www.jnj.com

Biotechnology

Genomic Health, Inc. is a new company with a world class management and investment team committed to revolutionizing health through consumer genomics. Randy Scott (co-founder of IncyteGenomics), Joffre Baker (Genentech), Steve Shak (Genentech), Gene Early (The Beracah Group, Ltd.), and Patrick Terry (PXE International) make up the founding team. Genomic Health is dedicated to applying genomic technologies to create new markets in consumer health and have a positive impact on people's lives. Bring your revolutionary spirit and dynamic drive to help us create the new era of consumer genomics.

Senior Director, Human Genome Epidemiology and BioStatistics

Responsible for building group to provide scientific excellence in analyzing genomic and clinical data. Will take leadership role in spearheading the use of systematic approaches to understand the impact of genomic variation on health, disease, and medical practice.

REQUIREMENTS:

A Ph.D in Epidemiology/Statistics/BioStatistics, or closely related discipline with a minimum of 7 years experience in academia or industry.

Director, BioStatistics

Responsible for design and analysis of laboratory studies, using TAQMAN, microarray, and SNP technologies, to establish validated genomic assays. Will provide key input to the use of these assays in human studies.

REQUIREMENTS:

A Ph.D in Statistics/BioStatistics, or closely related discipline with a minimum of 5 years experience in industry.

Head of Technology Development

Lead technical development of genomic analysis products from initial methods research through beta phase proof of concept tests. Lead internal research and external surveillance of new technologies important for the future success of the company's personalized genomics business.

REQUIREMENTS:

Ph.D in bioengineering, molecular biology, or related biotechnology field. Five years of industry experience in development and management of DNA/genomics technology.

Bioinformatics Specialist (I)

A Ph.D (+0-5 years) level scientist with significant Statistics and Molecular Biology experience. Prior design and optimization for TAQMAN protocols, Data Analysis and Dbase access with some C++ experience a plus.

In addition the company is actively recruiting to fill open positions for molecular biology scientists and research associates, bioinformatics scientists, and database programmers/managers.





Genomic Health, Inc. Palo Alto, California www.genomichealth.com jobs@genomichealth.com

R E S E A R C H P R O F E S S I O N A L S

POSITIONS AVAILABLE IMMEDIAT



LINDSLEY F. KIMBALL RESEARCH INSTITUTE- A DIVISION OF NEW YORK BLOOD CENTER



Be part of the exciting scientific innovations at the Lindsley F. Kimball Institute of the New York Blood Center; one of the world's leading centers for basic and applied research in hematology and transfusion medicine. Currently, we offer the following excellent opportunities in wide-ranging specialty areas.

*RESEARCH SCIENTIST

Immunohematology (Dr. Marion Reid, Lab Head)

Responsibilities involve cell culture, immunization of mice, screening supernatants by hemagglutination, immunoblotting, and identification of antibodies. **To qualify**, you must have a MT (ASCP) SBB (Ph.D. preferred); experience with cell culture techniques, hybridoma procedures, immunoblotting, and hemagglutination. You must be a self-motivated team player.

*RESEARCH FELLOW

Cell Biology (Dr. Chaudhuri)

You will conduct research for cloning of red blood cell receptor(s), involved in malaria parasite invasion.

To qualify, you must have a Ph.D. degree; experience with protein purification, immuno-affinity purification and immunoblot technique; and knowledge of molecular biology techniques including cDNA cloning, DNA & RNA blots, and plasmid DNA preparation. Knowledge of cell culture techniques desirable.

*RESEARCH FELLOW

Stem Cell Biology (Dr. Jan Visser, Lab Head)

Your primary focus will be on the analysis of the functions of newly discovered genes with a relatively high expression in early hematopoiesis. **To qualify**, you must have a Ph.D. or Ph.D/MD, a background in molecular biology with a strong focus on experimental hematology or developmental biology.

*RESEARCH FELLOW

Stem Cell Biology (Dr. Alexander Belyavsky)

Position involves creation of several transgenic fluorescent reporter mouse strains for studies of stem cell transdifferentiation. **To qualify,** you must have a Ph.D. degree and substantial expertise in molecular cloning. Experience in ES culture, gene targeting and/or mouse embryology would be an advantage.

*RESEARCH ASSISTANT

Blood Coagulation Biochemistry (Dr. A. Bini)

Use of osteosarcoma and endotelial cells in vitro experiments with different techniques; expression of matrix metalloproteinases and growth factor assays; purification of various fibrin fragments after proteolysis with MMPS and plasmin. To qualify, BA/BS in biological sciences or M.S. degree in biological sciences and 0-5 years of laboratory experience. Proven cell culture experience, and molecular biology techniques. DNA & RNA purification, expression, PCR, recombinant proteins. Basic biochemistry techniques, protein purification, gel eletrophoresis, transfer and immunoblotting.

We offer competitive salaries, full benefits and some of the most talented researchers in the field today. Please Specify the Position and Name of Doctor under that Position when applying! Fax: 212-468-2082; e-mail: careers@ccmail.nybc.org; or forward resume to: Human Resources Dept-MK, New York Blood Center, 150 Amsterdam Ave., New York, NY 10023. Visit our Website at: www.nybloodcenter.org.

EOE M/F/D/V

△Lindsley F. Kimball

Research Institute
A Division of the New York Blood Center

Gordon Research Conferences

VISIT THE *frontiers of science*. GO TO A GORDON CONFERENCE. Conferences at the Frontiers of the Biological, Chemical and Physical Sciences.

CHANGE OF **SCIENCE** ISSUE NOTICE:

The GRC summer and fall meeting schedule will not be appearing in the February 16, 2001 issue of *Science* as originally planned.

Instead, please make a note that the GRC schedule will now be appearing in the February 23, 2001 issue of *Science*. Thank You.

visit the frontiers of science at:

WWW.GRC.URI.EDU

Our web site contains the complete schedule of current and upcoming Conferences.

Apply directly from the web! Check it out now, Conferences fill up fast!

Assistant or Associate Professor Population Geneticist The Ohio State University

The Division of Human Cancer Genetics has an immediate opening for a tenure-track position at the Assistant Professor level. Candidates should have a Ph.D. and/or M.D. degree, postdoctoral experience, and a strong commitment to cancer genetic research. Experience and background in epidemiology associated with genetic variation will be important. The individual will be responsible for the support and maintenance of an independent research program in population genetics as well as cooperative research with other principal investigators engaged in several aspects of human genetics with an emphasis on cancer.

The Human Cancer Genetics Program is rapidly expanding under the leadership of Dr. Albert de la Chapelle, and contains both basic and clinical components. The program is affiliated with the Comprehensive Cancer Center and the Arthur G. James Cancer Hospital and Solove Research Institute and the Department of Molecular Virology, Immunology, and Medical Genetics. The Ohio State University campus includes an NIH-funded Comprehensive Cancer Center, the College of Medicine and Public Health, the nearby College of Biological Sciences, and other colleges with comprehensive undergraduate and graduate programs.

Applications should include a detailed curriculum vitae, a description of research experience and a statement concerning the nature of the planned independent research program. Information about the University and the Division of Human Cancer Genetics can be obtained by contacting our web sites (http://www.osu.edu and http://www.cancergenetics.med.ohio-state.edu).

Application material should be sent to:

Brad Harris 646 Medical Research Facility 420 West 12th Avenue Columbus, Ohio 43210

The Ohio State University is an equal opportunity/affirmative action employer. Qualified women, minorities, Vietnam era veterans and individuals with disabilities are encouraged to apply.



Mayo Clinic Research Associate Positions

Five positions are available at the Rational Molecular Design Lab to develop therapeutic agents using new techniques in computational chemistry and combinatorial chemistry: two Ph.D.-level computational biologists with experience in molecular mechanics and/or quantum mechanics calculations of biological systems; a synthetic chemist with at least an MS degree and experience in synthetic chemistry; a biochemist or pharmacologist with at least an MS degree and experience in in vitro and in vivo testing of therapeutic agents; and a computer programmer with at least a BS degree and knowledge of parallel computing and statistical mechanics. Salary will be determined by the successful candidate's experience. There is also an attractive benefits package. Mayo Clinic is a non-profit physician led clinical practice integrated with education and research in a unified multi-campus system. Mayo Clinic has an annual research budget of more than \$100 million. Applications including CV and three recommendation letters should be sent to:

Yuan-Ping Pang, Ph.D.
Mayo Clinic
Guggenheim 711A
200 First St. SW
Rochester, MN 55905
pang@mayo.edu
See also http://www.mayo.edu/research/

Mayo Foundation is an affirmative action and equal opportunity employer and educator.



NINDS - at the Cutting Edge of Neuroscience

This is an extraordinary time in the field of neuroscience when fundamental discoveries are being made at a breathtaking pace and their application to neurological disorders is proceeding at an accelerating rate. To meet the challenge of new findings and to further enhance the pace of discovery and translation of fundamental discoveries to useful therapies, the National Institute of Neurological Disorders and Stroke (NINDS) has embarked on an ambitious planning and recruitment process. We seek excellent scientists and physicians to serve as program directors in the planning, administration, and evaluation of the research supported by our institute.

The mission of the NINDS is to reduce the burden of neurological disorders by conducting and supporting research on the normal and diseased nervous system. To achieve this mission, we seek critical, resourceful and imaginative scientists, especially those who offer expertise in one or more of the following areas: Channel and/or synaptic research (preferably at the molecular and/or signal transduction level); Neural circuit research at the system level; Neural Imaging; Cognitive Neuroscience; Human Neurogenetics; Genomics; Developmental Neuroscience; Immunology; Virology; Clinical Trial Design, Methodology, or Management; Stroke, Parkinson's Disease, ALS, and other Neurodegenerative Disorders.

Successful candidates will join a highly interactive group of scientists and clinicians directing research programs in all areas of modern neuroscience and neurological disorders. Program directors will be at the cutting edge of neuroscience as they plan and implement research programs through active communication with the extramural professional and lay communities, as well as with program directors in other institutes and agencies.

Applicants should have a Ph.D. and/or M.D. in a relevant field of biomedical or behavioral science. For more information, full announcements can be obtained from the NINDS web site: http://www.ninds.nih.gov/jobs_and_training/.

Submit your curriculum vitae, bibliography, and a letter describing your scientific interests, experience in directing scientific programs, knowledge of the grant process, and leadership/communication skills to: Mr. Luis Arvelo, National Institutes of Health, NINDS Human Resources Branch, Building 31, Room 8A23, 31 Center Drive, MSC 2540, Bethesda, MD 20892-2540, or you may fax it to (301) 480-0383. For salary and benefits information, you may call Mr. Arvelo at (301) 435-6033 or e-mail him at la45j@nih.gov.

For information on qualification requirements and clarification of duties, contact Dr. Constance W. Atwell at (301) 496-9248 or e-mail her at ca23c@nih.gov

This position may be filled with career or temporary appointments. Salary will be commensurate with experience. Recruitment bonus and relocation allowance may be paid. In addition, physicians may be eligible for a Physician's Comparability Allowance.

The Institute has a strong commitment to the diversity of its workforce and a biomedical research environment that reflects the diversity of the American population (www.ninds.nih.gov/eeo/). Therefore, the Institute is keenly interested in receiving applications from women, minorities, and individuals with disabilities.

The NIH is an Equal Opportunity Employer

Two Postdoctoral Positions are available to study Biomaterial Science and Tissue Engineering at the Laboratory of IsoTis NV, The Netherlands.

IsoTis NV is a young innovative biomedical company that is a spin-off of the Biomaterials Research Group from Leiden University, The Netherlands. Its mission is to fulfill the increasing need for human tissue and organ replacement by bridging the gap between materials science, tissue engineering and biotechnology. IsoTis' ambition is to become one of the global leaders in Substitution Medicine. After hiring its first staff in 1997, presently over 110 people work for IsoTis. The company has collaborations with various international academic institutions including MIT and as a result of its strong growth, is currently seeking highly motivated and qualified research staff for their Bilthoven location in The Netherlands.

Post Doctoral Position Bone Tissue Engineering is available to study Biomaterial Science and Tissue Engineering. The research will involve proprietory bone tissue engineering technology that will ultimately be used to coat implants with a layer of patient-own bone tissue. Applicants must have a PhD in Biomedical Engineering, Materials Science, Biological Science or a related discipline. The ideal candidate has a strong background in cell biology, a proven track record in bone tissue engineering, and knowledge of genetic engineering. Preferably you have post-doctoral academic or industrial experience. The successful candidate will be a member of a young and enthusiastic team of approximately 15 scientists, technicians and PhD students.

Post Doctoral Position Cartilage Tissue Engineering is available to study Biomaterial Science. The research will involve developing a treatment for articular cartilage defects based on the engineering of cartilage from the patients own cells. Applicants must have a PhD in Biomedical Engineering, Materials Science, Biological Science, Medicine or a related discipline. The ideal candidate has a strong background in Cell Biology. A proven track record in cartilage tissue engineering or in biomedical/clinical aspects of cartilage, and experience with animal models is preferred. The successful candidate will be a member of a young and enthusiastic team of approximately 10 scientists, technicians and PhD students.

IsoTis NV offers an unique innovative working environment for highly qualified and motivated people with excellent communication skills. Publication of results in peer-reviewed journals is strongly encouraged. Salary is contingent on experience and qualification. Applicants should submit their CV and two reprints of recent publications to:

jobs@isotis.com or IsoTis NV, Human Resources Department, P.O. Box 98 3720 AB Bilthoven, The Netherlands www.isotis.com/ Phone +31-30-2295229/ Fax +31-30-2280255

PRE-& POSTDOCTORAL TRAINING IN MAMMALIAN GENETICS

The Jackson Laboratory, a non-profit research center, provides a unique research environment with unparalleled resources for training in animal models of development & disease.

Areas of expertise include: Cancer, Developmental Biology, Aging, Genetics of Complex Traits, Genomics, Immunology/Hematology, Metabolic Diseases, Neurobiology, Bioinformatics/Statistical Genetics, Cryopreservation/Assisted Reproduction

Letters of application should include: Curriculum vitae, statement of research interests, list of publications, and names of three references. Predoctoral program is in conjunction with the University of Maine and is limited to US citizens or permanent residents.

To apply contact: Suzanne Serreze, The Jackson Laboratory, 600 Main Street, Bar Harbor, ME 04609; Phone: 207-288-6420, FAX: 207-288-6079, email: sbs@jax.org, http://www.jax.org.

EO/AA Employer



Tenure-Track Faculty Position in Neuroscience at the Medical College of Ohio

The Department of Anatomy and Neurobiology at the Medical College of Ohio invites applications from outstanding candidates for a tenure-track faculty position. Faculty rank is open but preference will be given to those applying at the Assistant Professor level. We seek a candidate using molecular, cellular, systems, or biophysical approaches to investigate fundamental questions in neuroscience that complement the interests of other faculty members. Teaching responsibilities will be in Medical Histology and Graduate Neuroscience courses. Applicants with an independent research program and proven ability to obtain extramural funding will be strongly preferred.

The candidate should have a Ph.D. or M.D./Ph.D. and at least three years of postdoctoral experience. The Medical College of Ohio and the Department of Anatomy and Neurobiology offer excellent facilities with a competitive start-up package for salary, equipment and laboratory space. Candidates should send a curriculum vitae, statement of research interests and three letters of recommendation to:

Marthe Howard, Ph.D.
Department of Anatomy and Neurobiology
Medical College of Ohio
3000 Arlington Avenue
Toledo, Ohio 43614-5805

Review of applications will begin on March 15, 2001 and will continue until the position is filled. The Medical College of Ohio is an equal opportunity/affirmative action employer.

Put Your Theories into Practice

Onyx Pharmaceuticals, (NASDAQ: ONXX), is the world leader in the discovery and development of viruses as novel cancer therapeutics. Our therapeutic adenoviruses multiply in malignant cells, destroy them, and spread to neighboring cancer cells with little or no apparent harm to normal tissue. ONYX-015 (CI-1042) has advanced to Phase III clinical status since entering the clinic in 1996 and we are continuing to pave the way by answering exciting scientific questions throughout the development of this novel biologic. We continue to further develop our technology by identifying new therapeutic virus candidates and by arming them to express therapeutic transgenes.

The rapid progress we have made reflects the talent and hard work of the individuals who conduct our lab research, manage our clinical trials, and support our scientific teams. We currently have opportunities for self-motivated professionals to join us in the following areas:

Virology

Senior Research Associates, Associate Scientists, and Scientists with virus/adenovirus background and extensive experience in Molecular and Cellular Biology.

Analytical & Formulation Development

Scientists to develop analytical methods for adenovirus characterization. Ph.D. is preferred

Pharm/ Tox Tumor Biology

Associate Scientists/Scientists with experience and skills in ADME/Pharmacokinetics, the use of radioisotopes, and inlife biodistribution studies.

For complete position descriptions and to find out more about our company, our vision, and our culture, visit our web site at www.onyx-pharm.com.

Onyx offers competitive benefits and compensation, including employee stock options, an employee stock purchase plan, and a 401(k) plan. Interested candidates may email a resume to resumes@onyx-pharm.com; fax to 510.222.9758; or mail to: Onyx Pharmaceuticals, HR Dept., 3031 Research Drive, Richmond, CA 94806-5206. If you e-mail your resume, please include it in the body of the e-mail rather than sending it as an attachment.

Onyx Pharmaceuticals is proud to be an equal opportunity employer and extends employment to men and women from culturally diverse backgrounds. We respect individual differences and recognize each employee as an integral member of our company. Our growing work force reflects these values.



www.onyx-pharm.com



VARIAGENICS is a full-scale pharmacogenomics company engaged in discovering and applying knowledge of genetic variability to create individualized drug therapy and companion molecular diagnostic products.

Do you want to join a team of talented people? We are a diverse group and represent a variety of specialties including informatics, biopharmaceutical research, genetics, clinical development, life sciences and diagnostics. We enjoy a working environment that is flexible and stimulating. We are always looking for creative and intelligent people to contribute to making us leaders in our field.

Director, Regulatory Affairs

Opportunity for a Regulatory Affairs professional to work in the emerging area of clinical pharmacogenomics with a highly focused clinical team. Must be able to lead the regulatory strategy for the company and interact at high levels with regulatory departments in biotech and pharmaceutical companies as well as the FDA and EMEA.

Population/Quantitative Geneticist

You will develop new methods for candidate gene-based analysis of human quantitative data from clinical trials that incorporate haplotype analysis and analysis of gene x gene interactions. Must have PhD and minimum of 3+ years experience.

Director/Senior Director Business Development

Acting as primary commercial liaison with biotech, pharma and diagnostic companies, you will have a proven track record in your ability to drive deals from concept through contract, while coordinating and focusing internal resources and external alliances.

Manager, Bioinformatics

Seeking experienced bioinformatics professional with experience running scientific software projects. MA/PhD in computer science or bioinformatics as well as minimum 2+ years experience including hands-on participation in a large-scale development project. Must have strong managerial and organizational skills to direct groups involved in the development of novel bioinformatics software, primarily on the UNIX platform.

Research Associates

Working as part of a dedicated team, you will perform a variety of molecular biology techniques and utilize state of the art robotic pipetting equipment in a high throughput sequencing laboratory. BS Science required. 1-2 years of laboratory experience in sequencing analysis/PCR techniques a plus.

Molecular Biologists Research Associate & Scientists

We have multiple openings in our Technology Development Group for individuals with experience in DNA/RNA isolation, purification, amplification, characterization and hybridization screening. Responsibilities include the creation and development of novel technologies and assays in collaboration with a multidisciplinary team. PhD or BS/MS with minimum 3+ years of laboratory experience required.

Bioinformatics Software Engineers

We are seeking software engineers with *C/C++* and scripting programming experience under the UNIX programming environment. Previous work with ORACLE and/or Java a plus, as is experience with scientific programming. BS/MA in computer science or related field and 2+ years industry experience.

Chemist

Work with multi-disciplinary team and develop assays designed to screen activities of thermostable polymerases. Develop methodologies to synthesize modified nucleotides or chemically cleave polynucleotides. PhD or MS with minimum 3+ years of laboratory experience required. Experience in pharmaceutical or biotechnology a plus.

Biostatistician

Working in a collaborative research environment, you will be familiar with population genetics and experienced in genetic association methods to lead the development of improved methods for pharmacogenetic analysis of clinical trial data. Must have PhD or MS and minimum 1+ years experience.

Director, Oncology

Working with a multi-disciplinary team, your role as the leader of oncology clinical development programs will be to work with clients in defining appropriate oncology pharmacogenomic programs for drugs in development or on the market. You will be responsible for designing, budgeting, planning and management of oncology pharmacogenomic clinical trials in conjunction with the clinical research group at Variagenics.

Please send your resume to: Human Resources, Variagenics, Inc., 60 Hampshire Street, Cambridge, MA 02139; Fax: (617) 714 -1601; E-mail: humanresources@variagenics.com An Equal Opportunity Employer



The World is Ours-To Heal.

Centocor, a wholly-owned subsidiary of Johnson & Johnson, is a world leader in monoclonal antibody technology. We specialize in the development and commercialization of therapeutic products to meet critical human healthcare needs in the areas of cardiovascular, autoimmune, and cancer disease management. If you are an independent self-starter who is at the top of your field, consider joining us in one of the following opportunities located in **Malvern, PA:**

Principal Research Scientist/Assistant Director - Oncology

Identify and characterize innovative antibody-based cancer therapeutics with a focus on immunotherapy for hematological malignancies and solid tumors. You will also manage the activities of members of the junior level scientific staff and also initiate and manage a variety of external collaborative research investigations to characterize potential products. Ph.D., 6+ years of experience in the pharmaceutical industry and a demonstrated record of accomplishment in oncology research required. (01-0000280)

Research Scientist/Senior Research Scientist - Oncology

Identify and characterize antibody-based cancer therapeutics with an emphasis on angiogenesis, tumor growth, invasion, metastasis, coagulation, and tumor-induced cachexia. The position involves the use of several state of the art in vitro and in vivo techniques. Ph.D. or equivalent, at least 1-3 years of postgraduate laboratory experience and a demonstrated record of accomplishments in oncology research required. Experience in immunohistochemistry, in situ hybridization, flow cytometry, immunoprecipitation, tumor cell survival pathways, molecular biology and protein biochemistry techniques is desired. (01-0000441)

Senior Research Scientists - Molecular and Cellular Biology

As a Senior Research Scientist, you will be responsible for either of the following:

- Develop and validate novel assay methods to assess immune response induction to therapeutic proteins (00-0003913)
- Participate in clinical research supporting inflammation research. (01-0000446)

Both positions require a Ph.D. in a relevant field, 5+ years of experience (including management expertise) and a therapeutic clinical program or trial background. An expert knowledge of various analytical techniques, including EIA, HPLC and/or RIA is essential. Ideal candidates will have an immunology background. Your scientific repertoire must encompass protein biochemistry skills in isolation, labeling, and identification, as well as advanced assay qualification and/or validation strengths.

Associate Scientist II - Immunobiology

Contribute to research activities by performing various in vitro and in vivo experiments, analyzing data and summarizing and recording results. This will include designing and implementing strategies for product generation, screening and evaluation with emphasis on recombinant DNA method, EIA, RIA and cell-based biology assays. BS degree with 2-6 years of experience or MS degree with 1-3 years of experience required. Must possess state-of-the-art molecular biology skills and knowledge of mammalian cell culture, EIA, RIA, ELISA, FACS and use of radioisotopes. (01-0000309)

Associate Scientist - Molecular Biology

Assist in the development of biological therapeutics using molecular biology techniques. This will include cloning genes of interest and engineering, expressing and characterizing recombinant proteins for therapeutic evaluation. In addition, you will investigate innovative molecular technologies. Candidates should have a BS with a minimum of 2 years of relevant experience or an MS with 1-6 years of experience. Significant experience in recombinant DNA technology and culturing of mammalian cells is necessary. Experience with cell expression systems, protein purification and basic immunology techniques would be a plus. (01-0000043)

Associate Scientists I/II; Sr. Associate Scientists/Research Scientists - Gene Delivery/Vaccine Development

Several positions are available to evaluate vaccine candidates in pre-clinical/clinical methods, conduct laboratory research and contribute to the clinical development of products in a variety of disease states relating, but not limited, to cancer. Experience with flow cytometry, proliferation, cell lysis, cytokine production assays and tumor models/gene therapy highly desirable. Candidates with the following credentials are encouraged to apply:

- Ph.D. and 0-5 years of experience or MS and 5-8 years of experience. (01-0000178)
- MS and 2-5 years of experience or BS/BA and 4-8 years of experience. (01-0000173)



As a valued team member, you'll receive a competitive salary and great benefits including medical/dental, 401(k), a pension plan and a comprehensive wellness program. Please apply directly on-line at our web site www.centocor.com or forward a scannable resume, noting operating company as Centocor and Req. Code, to: Johnson & Johnson Recruiting, P.O. Box 16597, New Brunswick, NJ 08906-6597. Please note: resumes received electronically via centocor.com are reviewed within 24 hours. Mailed resumes are reviewed within 3 business days after receipt. We are an equal opportunity employer totally committed to diversity.

RESEARCH OPPORTUNITIES

What an exciting time to consider joining the Research Staff at Children's Mercy Hospitals & Clinics located in Kansas City, Missouri.

1. Research Scientist in Pancreatic Organogenesis

Seeking an experienced Ph.D. level applicant who has expertise in cell biology and possibly cell signaling to study various aspects of early pancreatic development in the mouse. Applicants will receive a salary line through the hospital as a research scientist and will be encouraged to progress toward independent function and toward independent funding. Please reply to George Gittes, M.D., (ggittes@cmh.edu)

2. Post-doctoral Fellowship

Seeking a recent Ph.D. applicant (within 2 years of graduation) with expertise in mammalian gene regulation to investigate the pharma-cogenetic determinants of susceptibility to specific drug-induced birth defects. Knowledge of drug biotransformation systems and experience with DHPLC, EMSA, DNA footprinting and sequencing, primary human cell culture and related techniques is desirable. Term of appointment is 3 years with possible 1 year extension. Please reply to Steven Leeder, Pharm D., Ph.D, (sleeder@cmh.edu)

We offer competitive salary & excellent benefit package to include relocation assistance.



2401 Gillham Road Kansas City, MO 64108 Attn: Valerie Bani-Nasur (vbaninasur@cmh.edu) Fax: 816-855-1989

Office of Industrial Affairs Sloan-Kettering Institute

Senior Licensing Associate

Maximize the commercial potential of the Sloan-Kettering Institute's intellectual property by planning and implementing strategies to develop, license, and market scientific/therapeutic inventions. In this supervisory role, you will manage a diverse portfolio of biomedical inventions; interact with SKI inventors, patent attorneys and licensees; and negotiate and draft license, confidentiality, collaboration, and material-transfer agreements.

This position requires 5+ years experience in the biomedical field, demonstrated experience in technology marketing and licensing, and knowledge of patent law. An MA/MS is required, PhD preferred. Job #01078.1R

Licensing Associate & Assistant

Reporting to the Director of Industrial Affairs, you will manage all phases of invention development and licensing. Through interaction with research laboratories, you will focus on technology with commercial potential for licensing or further research support; assess technical and market risks related to invention disclosures; and supervise filing and prosecution of patent applications.

The Associate position requires a strong science background, MA/MS, and 2-5 years of relevant experience in the biomedical field. A PhD, business/marketing experience, and knowledge of patent law preferred. Job #01079.1R

PhD candidates with a demonstrated interest in the biomedical field are encouraged to apply for the *Assistant* level position. **Job #01080.1R**

We offer an excellent salary and comprehensive benefits, including 100% tuition reimbursement. Please forward your resume, indicating Job# and salary requirements to: Employment Dept, MSKCC, 633 Third Avenue, 5th Floor, New York, NY 1000017. E-mail: browna@mskcc.org. Website: www.mskcc.org. EOE/AA.



The Scent And Taste

Of Discovery

Senomyx, Inc. has set the stage for a revolution in human sensory experience. By combining receptor-based biology, combinatorial chemistry, highthroughput screening and bioinformatics, we're creating products related to taste and

olfaction for markets including foods, fragrances, cosmetics, therapeutics, household products and more. Our goal is to become the world leader in the discovery and commercialization of products that enrich the sensory experience.

Distinguished scientists from major universities sit on our advisory board, and we've licensed chemosensory technologies developed at some of those same institutions. In our pre-IPO, entrepreneurial environment, you'll participate in building our technologies and our company, and have the satisfaction of knowing that you played an important role in Senomyx's growth.

Positions in Research:

BIOLOGY

- Receptor Biochemist Taste & Olfaction
- **Biochemist Assay Development**
- **Cell Biologist Receptor Expression**
- Cell Biologist Assay Development
- Head, High-Throughput Screening
- Engineer, High-Throughput Screening
- Research Associate Baculovirus Expression
- Research Assistants & Associates

CHEMISTRY

- Chemistry Group Leader
- Molecular Design Scientist
- **Synthetic Chemists**
- **Analytical Chemist**

INFORMATICS & INFORMATION TECHNOLOGY

- Senior Programmer/Analyst
- **Bioinformatics Scientist**
- **Chemoinformatics Scientist**
- Assay Data Management

ADMINISTRATION

- Executive Assistant
- Receptionist/Front Desk

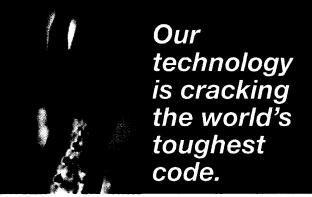
For complete job descriptions and requirements, visit our Web site at:

www.senomyx.com.

In Senomyx's open, start-up culture, we'll keep you informed of the latest company developments. We've created a fun, energized workplace with great company events. You'll have specific and measurable goals to achieve, and will be rewarded with a competitive salary/benefits package, including medical, dental, vision, 401(k), stock options, and the week between Christmas and New Year's off!

The future smells and tastes sweet at Senomyx. We invite you to forward your resume to: Senomyx, Inc., Attn: Human Resources, 11099 N. Torrey Pines Rd., La Jolla, CA 92037.

Senomyx, Inc.



There's a revolution in progress. It's changing the life sciences on a daily basis. Touching lives. Pushing technology to the limit.

At Applied Biosystems, we're leading that revolution. We're creating the systems that increase the speed and effectiveness of discovery for everything from basic research markets to industries such as pharmaceuticals, agriculture and environmental testing. In short, we're redefining the way the world looks at human genome studies.

You'll find Applied Biosystems in cities across the nation and in countries across the globe. And you'll discover we do things a different way. Offering opportunities to innovate. Chances to see your ideas become reality. We're currently looking for professionals to join us in the following positions:

Sr. Scientist (Foster City, CA)

Acts as technical lead for the production of Oligos during the pre-release process development phase of new product and process introduction. Requires BS/MS in Chemistry or Biology and 3 years of experience with oligonucleotide synthesis. purification and analysis. Req.# 01-001959

Scientist II (Foster City, CA)

Handles process development/documentation for the synthesis, purification and analysis of dye-labeled and unlabeled oligonucleotides. Requires 3 years of process development experience. Advanced degree in Organic Chemistry and related experience preferred. Req.# 00-001544

Sr. Manager, Process R&D (Foster City, CA) Manages the overall direction/prioritization of the Process R&D group. Requires 5+ years of management experience and experience with DNA synthesis technology, chemistry, and production. Ph.D. preferred. Req.# 01-002026

Sr. Software Engineer (San Jose, CA/Santa Fe, NM) Designs, develops, implements, documents and maintains large C++ database applications. Systems used include Solaris, NT, HP-UX, and OpenVMS. Requires a BSCS/MSCS and 3+ years of total application development experience. Req.# 00-001662

Sr. Software Engineer (Foster City, CA/Santa Fe, NM) Assists in the development of software to control and analyze data for genetic analysis/drug discovery. Requires 4+ years developing software applications and 2+ years with Java or C++, with substantial experience in object-oriented design and n-tier architecture. Req.# 01-002027

Sr. Software Engineer (Foster City, CA)

Handles code integration, build verification, maintenance and development on software products for genetic analysis. Requires a BSCS/MSCS and 1-3 years of total application development experience in C++ in an NT environment. Reg.# 00-001859

Please email your resume to: abscience@resume.isearch.com or send resume to: Applied Biosystems, Attn: Staffing Dept., 850 Lincoln Centre Dr., Foster City, CA 94404. You can also visit us at: www.abcareers.com to learn more about opportunities across the globe and apply online. Applied Biosystems supports diversity in the workplace. We are an Equal Opportunity



WE'RE CREATING THE FUTURE OF

BIOPHARMACEU

Chugai Biopharmaceuticals, Inc. (CBI) has a deep commitment to new discoveries designed to advance science while improving the quality of life. At our San Diego-based research facility, we're dedicated to the development of innovative therapeutic products for the treatment of cardiovascular disease, cancer and other diseases. By fostering creativity and developing our people, we're creating the future of biopharmaceuticals.

Immediate opportunities exist in the following areas:

Director, Discovery Biology

A highly creative and motivated biologist is needed to lead a multidisciplinary team in the areas of anticancer and cardiovascular disease. Will be responsible for all biological discovery activities including high throughput screening, in vitro and in vivo assay development, pharmaceutical profiling of prospective IND candidates, and establishing new oncology research initiatives. Requires a Ph.D. in Molecular/Cellular Biology, Pharmacology or related and at least 10 years' pharmaceutical industry research experience. A proven industry track record, particularly in the discovery of anticancer agents, is essential. Must possess strong leadership and scientific management skills, the ability to work in a multidisciplinary environment, and thorough knowledge of modern drug discovery technologies and molecular targets.

Staff Scientist - Biology

Ideal candidate will possess a Ph.D. in Molecular Biology, Cell Biology or related discipline and at least 5 years' postdoctoral research experience, including relevant experience in the pharmaceutical industry. Primary responsibility will be to establish and implement cell free and cellular assays to evaluate compounds in support of drug discovery projects for Oncology and Cardiovascular disease. Experience in these drug discovery areas is highly desirable. Incumbent must also contribute to the identification and implementation of new drug discovery targets. Excellent communication and scientific management skills are required along with the ability to work in a team environment.

Research Associate - Medicinal Chemistry

Contribute your talents to a dynamic team of chemists devoted to the design, synthesis, purification and characterization novel organic compounds for biological evaluation. A BS or MS in Chemistry is required, along with 1-5 years' of laborate experience in organic synthesis. Extensive knowledge of synthetic organic chemistry, modern purification techniques and spectroscopic methods is essential, along with strong written and verbal communication skills. The selected candidate ship be motivated toward self-development and enthusiastic participation in a team environment.

We offer highly competitive salaries to in prehensive nemers and thing in both print that For immediate consideration, please sind your resume to

> CHUGAI BIOPHARMACEUTICALS, INC. Attn: Human Resources, 6275 Nancy Ridge Dr., San Diego, CA 92121 Fax: 858-535-5996, E-mail: trice@chugaibio.com





Accelerate the

pace of scientific discovery

With our proprietary BeadArray™ and Oligator™ technologies, Illumina is accelerating genomic research and drawing closer to the ultimate goal of personalized medicine. We offer a tremendous opportunity to join the team that is raising the threshold of scientific achievement and discovery.

Illumina is positioned for exceptional growth in the realm of discovery science and you can contribute. We offer an extraordinary environment of great people, flex hours, competitive salaries and benefits including medical/dental, stock options, 4 weeks' paid time off, employee stock purchase plan, EAP, 401(k), tuition reimbursement and more.

Some of our openings are:

- Scientist, Bioinformatics
- Scientist, Molecular Biology
- Scientist, Chemistry
- Optical Systems Engineer
- Senior Mechanical Enginee

For the full story, visit our Web site at: www.illumina.com. Then, e-mail your resume to: jobs@illumina.com.
Mailing address: Illumina, 9390 Towne Center Drive, San Diego, CA 92121;
Fax: 858-587-1240. EOE.

www.illuming.com

Employment in Genomics

At Psychiatric Genomics, Inc., we are working to discover novel targets and ultimately treatments for CNS diseases such as Autism, Bipolar disorder and Schizophrenia. As a member of this rapidly growing team, located in the Washington, DC metro area, you could profit from a scientifically charged environment while taking part in a ground-breaking opportunity.

We are currently looking for strong candidates for the following positions:

Director of Neurogenetics

This highly visible position will be responsible to design and implement the company's gene discovery program and will be responsible for the application of cell based and model systems for gene/target validation and integration of these technologies into a drug discovery program for mental illness. This person will build and lead a scientific team of staff and outside collaborators and will integrate the access to tissue samples, cutting edge genotyping and gene expression technologies and their application to gene discovery. The incumbent will also be responsible to design and implement functional genomic and proteomic technologies, experiment design, data interpretation, follow-up studies and setting priorities for gene candidates that will go into drug screening. This person will also be responsible for the oversight and integration of neurogenetics/neurogenomics strategy into the overall company objectives, preparations of grant applications, presentations at scientific conferences, publications in peer-reviewed journals, and will prepare and present material relating to gene discovery approaches and technologies developed by the company and interactions with potential academic, pharmaceutical, and biotechnology partners.

The preferred candidate will hold a Ph.D. and/or MD with 8 or more years of post-doctoral experience (to include positions of leadership) using genetic and genomic information to identify potential drug targets and be familiar with all aspects of genetic and genomic studies as they relate to central nervous system disorders. This person would also be internationally recognized through publications, significant peer recognition, and have a wide understanding of neuroscience. Preference will be given to candidates that have a good understanding of the genetics of psychiatric diseases and have established evidence of genetic markers or identified putative gene candidates.

Senior Scientist/Scientist: Molecular and Cellular Neurobiology

In this position, you will use your experience in the molecular biology of the nervous system for developing programs to find new drug targets for CNS disorders.

For this position, you should have a Ph.D. and experience as a molecular biologist, cell biologist, neurobiologist or neuropharmacologist with considerable experience in studying the mammalian nervous system. Experience with molecular biological manipulations of neural stem cells, primary cultures of the nervous system and/or transformed nervous system cells is necessary. Knowledge of CNS anatomy/physiology and/or assay development for drug discovery programs would be an asset.

Scientist (Computational Biologist/Bioinformatics)

This challenging position will contribute to our core effort to interface between experimentation and data analysis. In this position, you will use computational tools to provide supporting data for preparation and analysis of biological experiments. This will be accomplished by extracting, processing, and analyzing sequence, expression, and clinical data from public and proprietary sources.

For this position, you should have the ability to multitask and prioritize diverse projects' needs, have a Ph.D. in molecular biology/genetics, preferably with some genomic lab experience, and be familiar with sequence analysis, expression analysis and annotation tools, programming skills in Perl, SQL, HTML.

Research Associate

The successful candidate will apply novel technologies to high throughput screening (initial assay development, validation and transfer to automated systems and following the assay through the HTS cycle), primary data management, data analysis and report generation.

To be considered, you should have a B.S. or M.S. degree in a relevant field with several years of experience in a high throughput screening assay development environment, to include the development of novel cell-based, enzymatic or binding assays and experience with HTS workstations, automation and data management software (e.g., ActivityBase). You must be a true team player and have strong organizational, analytical, problem-solving and communication skills.

Manager, Tissue Culture Facility

This critical position is responsible for managing a group of people developing several cell lines for use in high throughput genomics studies and high throughput screening. The preferred candidate will have extensive experience in tissue culture technologies – especially with scale-up of culture conditions, large-scale preparation and maintenance of both adherent and non-adherent cell lines and archiving of these cell lines.

To be considered, you should have a B.S. or M.S. degree in a relevant field with several years of experience in a variety of tissue culture techniques. The successful candidate must have prior managerial experience, exceptional organizational and communication skills and be proficient in Excel.

Research Associates, Tissue Culture

Two research associates for tissue culture and related activities. The successful candidates will be responsible for primary cultures of the mammalian central nervous system and its manipulation for adaptation to medium to large-scale experiments.

To be considered, you should have a B.S. or M.S. degree in a relevant field with some experience in tissue culture techniques. The successful candidates must have exceptional organizational and communication skills, as they will interface with two departments.

Research Assistant

This position will be responsible for the isolation and purification of total and mRNA from tissues and cell culture systems. Other activities include RT-PCR, Real Time PCR, northern blotting, probe synthesis, plasmid purification sub cloning DNA, screening cDNA and genomic libraries, tissue culture, transient and stable transfections of cell lines and reporter gene assays.

To be considered for this position, you should have a B.S. or M.S. degree in a relevant field and several years of related experience.

For consideration for one or more of these positions, please send your resume, references, and salary requirements, noting the position(s) of interest, to:

Psychiatric Genomics, Inc. Human Resources 19 Firstfield Road Gaithersburg, Maryland 20878 Fax: 301 556-1350 e-mail: scovello@psygenomics.com

EOE/M/F/H/V



Experimental Mammalian Genetics Lectureships/Senior Lectureships (2 posts)

The newly formed Cardiff School of Biosciences is seeking two highly motivated individuals to join its internationally renowned mammalian transgenics team. You will develop your own independent research programme, whilst interfacing with our extensive core research groups who are at the forefront of ES cell-based transgenic technology. You must have a PhD in biological sciences, with relevant post-doctoral experience. (Vacancy no. 051)

Salary: Lecturer £18731 - £30967 per annum Senior Lecturer £32510 - £36740 per annum

Senior Research Associates (2 Posts)

You should be an experienced researcher working in the field of mammalian genetics and will have ample opportunity within the scope of an ongoing programme. In addition to new manipulations there is a rich opportunity to re-address the trancriptional modifications contingent upon gene manipulation in numbers of existing lines using our microarray facilities. Experience in genome manipulation and functional genomics using ES cells is desirable. This post is fixed-term for 2 years. (Vacancy no. 056)

Salary: £23256 - £30967 per annum

Informal enquiries for both positions can be made to the Head of School, Professor Martin Evans on Tel: + 44 (0) 29 2087 4120.

We also have research positions in the following areas: Biogenesis of Integral Cytoplasmic Membrane Proteins (Vacancy no. 058), Analysis of Novel Genes in *Drosophila* Muscle Development (Vacancy no. 057), Ademomatosis Polyposis Coli (Apc) Gene (Vacancy no. 054)

For an application pack please ring the Personnel Division + 44 (0) 29 2087 4017 or email Persad1@cardiff.ac.uk quoting the relevant vacancy number.

Closing Date: 9 March 2001

Announcements



DEPARTMENT OF DEFENSE BREAST CANCER RESEARCH PROGRAM



A \$175M congressional appropriation for breast cancer research.

Join us in the fight against breast cancer.

Proposals are sought across a wide variety of disciplines including: basic, clinical, psychosocial, behavioral, sociocultural, nursing, and environmental sciences; occupational health; alternative therapies; public health and policy; and economics. Research proposals that address the needs of minority, elderly, low-income, rural, and other underrepresented and/or medically underserved populations are encouraged. Proposals also are encouraged from investigators working at Historically Black Colleges and Universities/Minority Institutions (HBCU/MI).

Available in February...

PROGRAM ANNOUNCEMENT I

Pre-proposals are being solicited for...

- Clinical Translational Research(CTR)

 Awards
- ◆ Collaborative CTR Awards Pre-proposal receipt deadline is March 14, 2001.

New this year:

→ Breast Cancer Center of Excellence Awards
These awards are intended to support the establishment of multi-institutional collaborations
among highly accomplished scientists from
diverse backgrounds to focus on a major
scientific problem in breast cancer.

Proposal receipt deadline is June 27, 2001.

Available by mid-March...

PROGRAM ANNOUNCEMENT II

Funds are available for Research, Training/ Recruitment, and Infrastructure Awards

The Breast Cancer Research Program will continue to offer the following:

Idea Awards, Clinical Bridge Awards, Predoctoral and Postdoctoral Traineeship Awards, Career Development Awards, Undergraduate Summer Training Program Awards, and HBCU/MI Partnership Training Awards.

New this year:

◆ An award will be offered to attract outstanding individuals from diverse fields to explore new avenues in breast cancer research. Proposal receipt deadline is June 13, 2001.

Program Announcements can be downloaded from http://cdmrp.army.mil. For questions or assistance, please call 301-619-7079.

Discover Phase-1 Molecular Toxicology



Phase-1 Molecular Toxicology, Inc. is a full service molecular toxicology company and a world leader in providing microarrays and joint software and database tools to enable toxicologists to both speed the process of drug discovery and development as well as ensure new drug safety. Phase-1's products and services use gene expression technologies, proteomics, and Bioinformatics to improve lead optimization, to expand the understanding of fundamental mechanisms, and to increase the throughput rate of toxicological screening.

We currently have exceptional career opportunities available at our modern Santa Fe, New Mexico Facility.

Research Associates: Multiple positions available to work in an R&D Toxicogenomics team, under the supervision of a Scientist conducting experiments in molecular toxicology. Molecular Biology experience in RNA isolation, RNA amplification, cDNA cloning, gel electrophoresis, RT-PCR tissue culture experience is preferred. Qualifications must include Master's Degree in Molecular Biology, Biochemistry, or Molecular Toxicology. A working knowledge of gene expression technology, cDNA microarrays and computer skills are highly desired.

Scientists: Multiple positions available to work in R&D managing and working in toxicogenomics. Two years post doc experience. Must understand principles & techniques of Molecular Toxicology. Background should include molecular biology experience in RNA isolation, RNA amplification, cDNA cloning, gel electrophoresis, RT-PCR. Current knowledge of techniques for determining differential gene expression (i.e. SAGE, AFLP, mRNA differential display, cDNA microarrays). Genetics background, statistics and tissue culture experience are a plus. Requirements include a Ph.D. in Molecular Biology, Toxicology, Biochemistry, Genetics or Pharmacology. Good leadership, computer and communication skills necessary.

Post-Doc Positions

Database Department – Recent PhD or Post-Doc experience in evaluating protein expression. Experience with 2D gel or more recent technology for open-ended identification of proteins.

Toxicogenomics Department - Extensive molecular biology experience including RNA isolation, RNA amplification, cDNA microarrays, gel electrophoresis, RT-PCR, and tissue culture. Genetics background a plus. Post-Doc candidates should have Ph.D.'s in

Toxicology, Molecular Biology, Molecular Toxicology, and Biochemistry. Candidates must be computer literate. A working knowledge of gene expression technology is highly desired.

We offer competitive salaries, commensurate with experience. To be considered, please submit your resume and cover letter, indicating salary requirements to:

Phase-1 Molecular Toxicology HR Department 2904 Rodeo Park Drive East Santa Fe, New Mexico 87505 Fax: (505) 471-8205

email: HR@phaseltox.com (text files only).



Mammalian Genomics

The Wadsworth Center and Albany Medical College

seek two new faculty (junior or senior) for their growing Genomics Institute. The Institute is dedicated to building an internationally recognized program that melds basic science and medical disciplines with genomic approaches to understanding mammalian development and disease. Outstanding resources include core facilities for microarrays, high-throughput genotyping, mouse transgenics, proteomics, DNA and peptide sequencing and synthesis, as well as structural analysis and imaging. Investigators will interact with the Center for Bioinformatics (a joint venture with Rensselaer Polytechnic Institute) and a molecular epidemiology program, and have access to data from one of the country's largest newborn screening programs.

Applicants require an M.D. or Ph.D. degree, postdoctoral experience, and a record of quality publications. Preference will be given to those using genomic approaches to analyze developmental processes or disease etiologies in mouse or man. Appointments with graduate teaching opportunities are through Albany Medical College and the University of Albany's School of Public Health.

Interested individuals should submit a CV, a statement of research interests, and three references to: Dr. Lorraine Flaherty, Director, Genomics Institute, Wadsworth Center, P.O. Box 22002, Albany, N.Y. 12201-2002.

Wadsworth Center, www.wadsworth.org
Albany Medical College, www.amc.edu
Rensselaer Polytechnic Institute, www.rpi.edu
School of Public Health, www.wadsworth.org/educate/graduate.htm



THE UNIVERSITY OF CHICAGO

The University of Chicago seeks a Director of its Functional Genomics Facility. This core facility contains state-of-the-art equipment for gene profiling, including an Affymetrix GeneChip Instrument System, Beckman Biomek 2000 robot, Genetic MicroSystem arrayer, Genomic Solutions microarray scanner, and ABI and Cepheid realtime PCR equipment. The individual will play a key role in the development of this facility and will be responsible for its operations, including interacting with a diverse group of University users and supervising the technical staff. Close collaborations with the Department of Computer Science at the University of Chicago exist. Experience with microarrays and bioinformatics is essential. Candidates who wish to make an intellectual contribution and enhance the research potential of diverse groups are preferred. Salary and benefits are extremely competitive and will be commensurate with training and experience.

Interested individuals should send a copy of their cv and a list of three references to

Dr. Richard Quigg, at rquigg@medicine.uchicago.edu.

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MOLECULAR BIOLOGIST

MYRIAD GENETIC LABORATORIES, INC. SALT LAKE CITY, located adjacent to the University of Utah is a publicly-held biopharmaceutical company focused on the development of therapeutic and diagnostic products that are based on the use of genomics and proteomics technologies.

Our Clinical Genetic Laboratory, which performs predispositional genetic testing, is recruiting for a Molecular Biologist. Requirements for this position: Ph.D. in Molecular Biology at least 2 years post doctoral experience with strong emphasis in DNA sequencing, robotic automation and new methodology evaluation and implementation. Will manage the technical aspects of our current DNA sequencing utilizing a miniaturized robotics format. Will be required to do end stage development and maintain a stable diagnostic production process that meets our exacting quality standards, and will closely interact with research with regard to new technology assessment and introduction into our laboratory. Must have strong biochemical understanding of Automated DNA sequencing, preferable with ABI sequencers. Must have basic understanding of the use of robots and automation to assist in high-throughput sequencing and specimen handling. Experience in developing diagnostic tests and in technology transfer into a clinical laboratory, and appreciation for new methodology evaluation, long range evaluation of tools for future mutation detection, miniaturization of our process and managing the costs of sequencing.

We offer an attractive compensation package and a stimulating, interactive work environment. Please mail or fax a cover letter, specifying job #2-400 A, a complete resume, and the names of three professional references to: Human Resources Department, Myriad Genetics, Inc., 320

Wakara Way, Salt Lake City, UT 84108. FAX: 801-584-1144; E-MAIL: humanres@myriad.com. We are an equal opportunity employer.

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Opportunities in Multidisciplinary Biology

The Pacific Northwest National Laboratory is looking for outstanding scientists to help build a new program in multidisciplinary biology, with a particular focus on mechanisms by which cells process information at the cell surface. The new program combines approaches such as mass spectrometry-based proteomics, novel cell visualization instrumentation and computation biology to provide a systems-level understanding of how cells respond to their environment.

We are seeking qualified applicants at all professional levels. We are particularly interested in researchers who apply cutting-edge techniques in molecular/cell biology, proteomics, and biochemistry to address contemporary problems in cell signaling, including apoptosis, protein-protein interactions, proteolysis, membrane trafficking and cell migration. These positions offer unparalleled opportunities to participate in the early stages of a major initiative in post-genomic sciences at the interface of experimental biology and the physical and computational sciences.

Pacific Northwest National Laboratory is an exciting, dynamic research institution with a strong history of innovation and scientific excellence. Operated by Battelle for the U.S. Department of Energy, the Lab offers a range of diverse research opportunities from fundamental science to applied research and technology. Located in Richland, Washington, the pleasant desert climate and Columbia River make this area great for outdoor activities such as hiking, biking, and snow and water skiing. Coupled with the small town atmosphere, this area provides a unique mix of rural living with high tech opportunities. For more information, please visit our website at: http://www.pnl.gov/. Interested parties should submit curriculum vitae, statement of professional goals and research interests to:

Search Committee K9-21 c/o Dr. David Springer Pacific Northwest National Laboratory P.O. Box 999 Richland, WA 99352

> Pacific Northwest National Laboratory Operated by Battelle for the U.S. Department of Energy

PNNL is an EEO/AA employer and values diversity in the workplace. F/M/D/V are encouraged to apply.

GRADUATE PROGRAMS



Graduate Training for the Biology of the Future

The post-genomic era of biological research will focus on understanding how complex, inter-linked systems function in living organisms. New combinations of skills, and therefore new kinds of Ph.D. training, will be required of future biological scientists. To address this need, Montana State University announces a new Ph.D. program in the Structure and Function of Complex Biological Systems, funded by the National Science Foundation's IGERT program. This multidisciplinary training program provides students with the opportunity to study with faculty from Biological, Chemical, Mathematical, and Computer Sciences. State-of-the-art research, instrumentation, and computational facilities are available. Research areas encompass, but are not limited to:

- Structural, Molecular, Cellular & Developmental Biology
- Experimental & Computational Neurobiology
- Mathematical Modeling, Bioinformatics & Algorithm Development

Graduate study at MSU offers a unique opportunity to obtain outstanding scientific training in a spectacular mountain environment. Applications and additional information are available at http://cbs.montana.edu/ or by contacting us at cbsinfo@cbs.montana.edu or (406) 994-7330. Review of applications will begin after February 21, 2001. Minorities and underrepresented groups are encouraged to apply. Only citizens and permanent residents of the US are eligible.

REGENERAL PROPERTIES IN

Regeneror Pharmaceuticals In an armaceutical compared to be covers, sevelops a intends to commercialize therape for the treatment of seving colical conditions. Our platform technologies include Targ tenomics.", Functionomics and Continuer Protein Therapeutics.

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i.D. preferably with 1-2 years — be pall experience, with subground in more risk broken and trope in the subground in the subground of the sub

SCIENTISTS LEESEARCH A

Outside and dates should possess a Ph.P. (recent or with Scients) positions or a BS or MS degree in a prological solar with experience in some or all of the following combinations cell culture, tissue cultures and the combinations are considered.

secrete positions response positions res. PCP, Southern blotting,

For more information about Regeneror and statisticience, go to our website at www.regeneron.com. To apply, please send a resume and cover liter, including salary history and requirements, to Job Code: VGEB-SCI, REGENERON Programmentalis, Inc., Attn: Human Resources, 777 Old Saw Mill River Road, Tarrytown, New York 10561 Fax: 914-345-7790 E-mail: jobs2@regpha.com (text or PDF only) EOE WF/DN

National Institutes of Health

Postdoctoral Fellowship

Postdoctoral fellowship positions available at the National Institute of Diabetes and Digestive and Kidney Diseases, NIH, Bethesda, MD starting July 1, 2001 to join a laboratory studying progenitor/stem cells and development of beta cells of human islets of Langerhans. Experience in cell and developmental biology and familiarity with molecular biological techniques required. Projects involve isolation of progenitor/stem cells using fluorescence activated cell sorting and analysis of gene expression using microarrays. Please send curriculum vitae and list of publications and three references to:

Dr. Marvin C. Gershengron
Office of the Director
Division of Intramural Research
National Institute of Diabetes and
Digestive and Kidney Diseases, NIH
Building 10, Room 9N222
9000 Rockville Pike
Bethesda, MD 20892-1818
E-mail: mcgersh@med.cornell.edu

NIH is an Equal Opportunity Employer

INTERDISCIPLINARY POSITION

The National Institute on Deafness and Other Communication Disorders (NIDCD) is recruiting for a full-time, interdisciplinary position to administer the Smell Program. The initial appointment may be made up to five years with option to renew. The incumbent assists in formulating and supervising a comprehensive program of grant research support in basic and clinical research on olfaction that involves a broad range of levels of analyses, including human psychophysical, computational, systems, morphological, cellular molecular, genetic electrophysiological approaches. The incumbent evaluates ongoing olfactory research, contributes to the overall administration of the Smell Program, provides scientific expertise in the general field of olfaction and serves as a source of technical knowledge. For further description of duties and responsibilities, see NIDCD-01-0001 at http://careerhere.nih.gov. Applicants are required to submit a curriculum vitae plus bibliography, two letters of reference from noncollaborators, copy of doctoral degree and certified translation if applicable, and proof of U.S. permanent residence to: Patricia Jennings, NIDCD Personnel Office, 31 Center Drive, Building 31, Room 3C-11, Bethesda, MD 20892. Applications must be postmarked by April 16, 2001.

For additional information contact: (301) 402-0508 or (301) 402-1562 TDD.

The N.I.H. is an Equal Opportunity Employer

POSTDOCTORAL POSITION

A postdoctoral position is available to study cell cycle regulation in budding yeast. Projects include the identification of novel proteins involved in mitotic regulation, the role of the mitotic inhibitor Pds1 in cell cycle regulation and in the DNA damage checkpoint pathway, and the identification and analysis of Pds1's functional domains. Studies will involve the use of genetic, molecular and cellular biology and biochemical methodologies. Successful applicants will benefit from a creative and collaborative environment. A strong background in molecular biology, cell biology, or yeast genetics is required. Applicants must have a Ph.D. or M.D. degree and should have less than five years of postdoctoral experience. Please send curriculum vitae and names of three references to: Dr. Orna Cohen-Fix, NIH, NIDDK, 8 Center Drive, Building 8 Room 319, MSC 0840, Bethesda MD 20892-0840. Or by E-mail to: ornacf@helix.nih.gov.

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DIRECTORS WANTED!

USD 40 Million for Build-up of Research Centres within the Life Sciences in Sweden

The Swedish Foundation for Strategic Research has allocated SEK 400 million (appr USD 40 million) to establish 3-5 Strategic Research Centres in the area of life sciences at Swedish universities. Each centre will receive an annual grant of SEK 10-20 million for six years (incl. Swedish overhead and VAT).

The Foundation hereby announces positions as directors for these centres. Preproposals are invited from scientists in Sweden as well as in other countries.

A "Strategic Research Centre" is defined as a scientifically focused and geographically co-localised research environment, with an intellectual and technical critical mass and with a long-term industrial relevance. The centres should be world-leading in their specific scientific area and based upon co-operation between research groups with scientific competence in complementary areas. Each centre is to be managed by a Director, who should be an independent, young and active scientist with documented excellence in science and teaching and with a leadership record.

The research activities in each centre should cover one, or preferably several, of the following topics within the life sciences, but the specific scientific issues within these topics are to be defined by the applicant.

- Mechanisms in biological systems
- Computational biology
- Structural biology
- New approaches to diagnostics, prophylaxis or therapy
- Biotechnological approaches in, e. g., agriculture, forestry or in the pharmaceutical or food industry
- Technological platforms

A preproposal should include the applicant's scientific vision for the proposed centre, previous research accomplishments, CV, personal references and letters of support. These should arrive at the Foundation no later than 15 May, 2001.

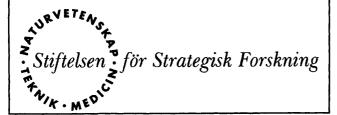
For guidelines and further information on the application procedure, please visit the web site of the Foundation, www.stratresearch.se

Chaired by former Swedish Prime Minister Ingvar Carlsson, the Swedish Foundation for Strategic Research is an independent major funding body working outside the Swedish government budget. Financing research in natural science, engineering and medicine it was established by a parliamentary decision in 1994 with a capital of SEK 6000 million (appr USD 620 million) from the earlier wage-earner funds.

The primary goal of the Foundation is to promote the development of vigorous research environments of the highest international standard with a view to enhancing Sweden's long-term competitiveness. The Foundation maintains informal co-operation with Swedish research councils and other agencies financing basic and applied research.

The total expenditure of the Foundation is some SEK 1000 million (appr USD 100 million) per year in the period 2000-2002.

Through an active investment policy and favourable stock exchange development, the capital assets of the Foundation amount to SEK 11 500 million as of January 2001. According to its statutes, the activities of the Foundation may in due course result in the expenditure of all its assets. Presently the lifetime of the Foundation is expected to reach well into the 2020s.





Dendreon Corporation is a public biotechnology company dedicated to the discovery & development of novel products for the treatment of cancer through its innovative manipulation of the immune system.

SENIOR SCIENTIST - PROCESS SCIENCE

Responsibilities include the elucidation of cell processes & product characterizations from the laboratory through pilot plant & transfer to cGMP manufacturing. He/she will also supervise a group of scientists & RAs & will contribute to the writing of technical & regulatory submissions.

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Primarily responsible for the production of recombinant proteins in our 130L bioreactor including participating in process development, scaling efforts to 130L, producing materials using cGMP for clinical trials, & transferring processes to contract manufacturer.

Both positions require Ph.D. degree in related scientific discipline with 5 or more yrs. experience. We offer a competitive salary & benefits package, including bonus, matching 401(k) & stock options. Send your CVs to HR Mgr. FAX: 206-256-0571 or email to hr@dendreon.com

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Faculty Positions in Cancer Research LSU Health Sciences Center

The Stanley S. Scott Cancer Center at LSU Health Sciences Center in New Orleans invites applications for positions at the Assistant, Associate, or Professor level. Candidates should possess a Ph.D. or M.D. degree and have demonstrated excellence in their research as indicated by publications and a track record of externally funded research grants. The successful applicants will be expected to pursue an independent, yet collaborative approach, addressing broad issues that relate to oncologic science. Research interests in prostate cancer and/or tumor immunology are encouraged but not required.

The search will give full consideration to applications that include a curriculum vitae (including funding grant history), four representative publications, and the names of three individuals that may be contacted for letters of reference.

A joint appointment in the Cancer Center and an appropriate Department of Basic or Clinical Science at the LSU Health Sciences Center is anticipated. The individual Department will be dependent on the successful applicant's expertise and interest. Laboratory space will be provided in a new facility in the heart of the Health Sciences Center complex.

Interested candidates should submit their curriculum vitae to Dr. Oliver Sartor, Director, Stanley S. Scott Cancer Center, Suite 4E1, 533 Bolivar Street, New Orleans, Louisiana 70112.

LSUHSC is an Equal Opportunity/Affirmative Action Employer.

Geron is a biopharmaceutical company focused on discovering, developing and commercializing therapeutic and diagnostic products for applications in oncology, drug discovery and regenerative medicine. Geron's product development programs are based upon three patented core technologies: telomerase, human pluripotent stem cells and nuclear transfer.

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Geron Corporation provides employees an opportunity to be part of a multidisciplinary team. We depend on each employee to take ownership and contribute to our shared goals. Together, we have created a working environment that is entrepreneurial, professional, challenging and friendly.

Computational Biologist (Job# SC2900)

Integrate large cDNA clone sets with micro-array gene expression data to identify and evaluate genes controlling cellular differentiation. Requires experience in signal transduction processes, regulatory cascades or control of cellular differentiation.

Scientist (Job# SC0901)

Vector construction and genetic modification of stem cells and their derivatives involving analysis and characterization of cell differentiation. Requires extensive molecular biology and tissue culture skills. Experience with ES cell growth and differentiation is a plus!

Research Associate (Job# SC1401)

Support research in the modification of embryonic stem cells and the characterization of the resultant cells. Cell culture experience and basic molecular biology skills required. Familiarity with immunocytochemistry is a plus! Requires a BA/BS (MA/MS prefd) in related field with 2+ years' industry experience.



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WAYNE STATE UNIVERSITY

Postdoctoral Positions in Cellular and Molecular Neuroscience

Several postdoctoral positions are available to study the cellular and molecular mechanisms regulating neural signaling. Successful applicants will play integral roles in a highly collaborative, multidisciplinary training environment. Special emphasis is placed on the career development of trainees.

Visit our web site http://psychiatry1.med.wayne.edu/cmnrd.htm

- Electrophysiology (whole cell recording techniques)
- · Promoter analysis of neuronal genes
- · Confocal microscopy
- Microarray analysis (gene expression profiling)
- · Protein biochemistry
- Cellular and molecular neurobiology
- · Human postmortem tissue and disease
- Transgenic animals

Interested candidates should send a brief letter describing their research interests, a curriculum vitae, and the names of three references to the appropriate principal investigator(s) at: Wayne State University School of Medicine, Department of Psychiatry and Behavioral Neurosciences, 540 E. Canfield Ave., 2309 Scott Hall, Detroit, MI 48201, or via e-mail.

Wayne State University is an equal opportunity/ affirmative action employer.

GLOBAL OPPORTUNITIES

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In
Scientific, Technical, Engineering,
and
Medical fields
at National Research Institutes

Details available on web site: http://stafellow.jst.go.jp/index.html

or

Department of International Affairs Japan Science and Technology Corporation (JST)

TENURE-TRACK FACULTY POSITION ASSISTANT PROFESSOR Molecular Viral Pathogenesis

The Department of Microbiology, Molecular Genetics, and Immunology at the University of Kansas Medical Center invites applications for a full-time tenure-track faculty appointment at the Assistant Professor level. Candidates must have a Ph.D. or M.D. degree or equivalent, demonstrated ability to pursue an independent research program, and proven accomplishments at the postdoctoral research level. We are interested in candidates using molecular approaches to understand the mechanisms employed by viral pathogens to cause disease. The successful candidate will be expected to develop and maintain an externally funded research program and actively participate in the medical and graduate teaching of the Department. Interested applicants should submit their curriculum vitae, brief research plans, copies of recent representative publications, and names and contact information of at least three references to: Dr. Bala Chandran, Search Committee Chair, Department of Microbiology, Molecular Genetics, and Immunology, University of Kansas Medical Center, 3901 Rainbow Boulevard, Kansas City, KS 66160-7420.

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

ASSISTANT PROFESSOR PHARMACOLOGY

The Department of Veterinary Biosciences of the University of Illinois, College of Veterinary Medicine at Urbana/Champaign, invites applications for an Assistant Professor in veterinary pharmacology.

Qualified applicants must have the Ph.D. or equivalent degree from an accredited institution and demonstrated experience in pharmacological research at the molecular level.

The successful candidate should plan to develop a program including both independent and collaborative research. This position also includes responsibilities in teaching and service.

Appointment will be on a nine-month academicyear basis to begin about August 21, 2001. Salary is commensurate with experience.

Qualified applicants are invited to submit a letter of intent, professional résumé, and names and addresses of three references to: Dr. Gary Koritz, Department of Veterinary Biosciences, College of Veterinary Medicine, University of Illinois, 2001 South Lincoln Avenue, Urbana, IL 61802. Telephone: 217-333-7981. In order to receive full consideration, applications should be received by April 30, 2001.

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

PHYSIOLOGY POSITION

The Department of Biomedical Sciences of the Ohio University College of Osteopathic Medicine is seeking to fill a tenure-track faculty position at the ASSISTANT or ASSOCIATE PROFESSOR level to begin by fall of 2001. Primary responsibilities are to teach organ system physiology in a clinically oriented, innovative medical curriculum and to develop an externally funded research program. Priority will be given to individuals with expertise in renal or gastroin-testinal physiology. A Ph.D. (or equivalent) and a minimum of two years of postdoctoral training are required. The 11-month salary will be commensurate with experience and accompanied by an excellent benefits package and start-up funds. Review of applications will begin March 15, 2001. Applications will be accepted until the position is filled. Submit a brief statement of research and teaching goals, curriculum vitae, representative reprints, and three letters of recommendation to: Richard E. Klabunde, Ph.D., Search Committee Chair, Department of Biomedical Sciences, Ohio University College of Osteopathic Medicine, Irvine 304, Athens, OH 45701. E-mail: klabunde@ohio.edu. Department website: www.oucom.ohiou.edu/dbms

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POSITIONS OPEN



Academic/research positions in growth factors/ stem cell biology/tissue engineering. The Growth Factor/Stem Cell/Tissue Engineering (GST) Program of Academia Sinica, Taiwan, is seeking outstanding individuals to fill several tenure-track positions at the ranks of ASSISTANT RESEARCH FELLOW/ASSOCIATE RESEARCH FELLOW/RESEARCH FELLOW (equivalent to Assistant Professor/Associate Professor/Professor). The GST Program is a newly developed biotechnology program that is cosponsored by four of the six life science institutes in Academia Sinica (Institute of Biomedical Sciences, Institute of Molecular Biology, Institute of Zoology, and Institute of Biological Chemistry). Applicants should have a Ph.D. or M.D. degree with interest and expertise in the fields of growth factor/cytokine biology, stem cell biology, or tissue engineering as well as a solid record of publications or patents. The appointments will be made in one of the above research institutes of the Academy, and the academic rank will be determined by the candidate's credentials and his/her ability to establish a vigorous and innovative research program in each case. Excellent start-up funds will be provided. While the laboratories of the GST program are housed mainly in the new building of the Institute of Biomedical Sciences, researchers will also have access to many state-of-theart facilities shared by the life science institutes including modern core facilities in structural biology, proteomics, bioinformatics, etc. In addition, Academia Sinica has established collaborative arrangements in cellular and developmental biology, human biology, and molecular medicine with a number of research institutes, medical centers, and universities in Taiwan and abroad. Academia Sinica is situated on an attractive campus located in a beautiful mountainous area on the northwest of Taipei, and the Academy is presently enjoying robust growth under the leadership of President Yuan-Tseh Lee, a Nobel laureate in chemistry. Interested applicants should write to: Dr. Jung San Huang, Institute of Biomedical Sciences, Academia Sinica, Number 128 Yen-Chiu-Yan Road, Section 2, Nankang, Taipei 11529 Taiwan, and include curriculum vitae and a list of four references (names and addresses). Applications could also be FAXED to the following number: 886-2-2785-

EAST STROUDSBURG UNIVERSITY DEPARTMENT OF BIOLOGICAL SCIENCES

East Stroudsburg University is seeking applications for an Environmental Biologist to direct the Environmental Studies Program beginning in fall 2001. The position is full-time, tenure-track, and at the ASSIST-ANT or ASSOCIATE PROFESSOR level. Requirements: Ph.D. along with a commitment to teaching at the undergraduate level and a strong background in environmental biology. Final determination will be based upon successful interview, which may include a teaching demonstration. Preference will be given to individuals with experience in academic advising; supervision of student interns; directing an environmental studies program; and teaching of environmental biology, general ecology laboratories, and other introductory courses. Applicants may also teach courses in an area of specialization; the area of specialization should be complementary to existing departmental expertise. Please visit website: www. esu.edu/biology/faculty.html for a review of existing faculty expertise. Send a brief letter of application; curriculum vitae; unofficial transcripts; and three letters of recommendation by March 9, 2001, to: Thomas C. LaDuke, Search and Screen Chair, Department of Biological Sciences, East Stroudsburg University, East Stroudsburg, PA 18301. Visit our website: www.esu.edu.

ESU is an Equal Opportunity Employer. Minorities and women are strongly encouraged to apply.

POSITIONS OPEN

FACULTY POSITION MICROBIAL PATHOGENESIS/ IMMUNOLOGY

The University of Utah seeks a highly qualified candidate with research expertise in the pathogenesis of viral, bacterial, or parasitic infections using state-of-the-art molecular, immunologic, and biochemical approaches.

A tenure-track position at the **ASSISTANT** or **ASSOCIATE PROFESSOR** level in the Department of Pathology is available at the University of Utah School of Medicine for individuals with Ph.D., M.D., or M.D./Ph.D. degrees.

Laboratory space will be in the School of Medicine building in space contiguous with members of the Department of Pathology, Division of Cell Biology and Immunology.

Qualified candidates will have a demonstrated record of scholarly, laboratory-based achievements and the scientific background to conduct independent, extramurally funded research.

Curriculum vitae along with a brief statement of current and future research should be submitted to the Search Committee as soon as possible. No applications will be considered after May 1, 2001. The application should also include the names and addresses of three individuals who have agreed to send recommendation letters upon request and should be sent to the attention of:

Kim Cash, Project Coordinator Microbial Pathogenesis Pathology University of Utah 50 North Medical Drive 5B412 SOM Salt Lake City, UT 84132 Website: http://molbio.med.utah.edu

The University of Utah is an Equal Opportunity/Affirmative Action Employer and welcomes applications from women and minorities.

BIOLOGY: Two-year VISITING ASSISTANT PROFESSOR to teach natural history of vertebrates, parts of the introductory biology sequence, and a nonmajors biology course in her/his area of interest. Ability to teach an introductory course in biostatistics and to direct undergraduate research in the College's required Independent Study program is essential. Expected to teach in the College's interdisciplinary programs, including first-year seminar. Ph.D. required; postdoctoral and/or teaching experience preferred. Send applications including curriculum vitae, college transcripts, and three letters of recommendation to: Dr. Margaret Hodge, Department of Biology, The College of Wooster, 931 College Street, Wooster, OH 44691. Closing date: March 2, 2001.

The College of Wooster is an independent college of the liberal arts and sciences with a commitment to excellence in undergraduate education. The College values diversity, strives to attract qualified women and minority candidates, and encourages individuals belonging to these groups to apply. Wooster seeks to ensure diversity by its policy of making appointments without regard to age, sex, race, creed, national origin, disability, handicap, sexual orientation, or political affiliation. The College of Wooster is an Equal Opportunity/Affirmative Action Employer.

OCEANIC EVOLUTIONARY BIOLOGIST. Institute of Marine and Coastal Sciences, Rutgers, The State University of New Jersey, invites applications for a tenure-track position from candidates working on the genetic structure of populations, phylogeography, or on the use of genomics to study the evolution and ecology of oceanic ecosystems. The successful candidate will contribute to the undergraduate and graduate teaching programs in marine sciences and oceanography. Rank of the position is open.

Send curriculum vitae; statement of research interests; and the names of three references by February 28, 2001, to: Dr. J. Frederick Grassle, Institute of Marine and Coastal Sciences, Rutgers, The State University of New Jersey, 71 Dudley Road, New Brunswick, NJ 08901-8521. Rutgers is an Equal Opportunity/Affirmative Action Employer.

OHSU

Post Doctoral Opportunities

Oregon Health Sciences University Biochemistry & Molecular Biology

Biomedical Research in the Pacific Northwest

Membrane Transport

Molecular Enzymology

Physical Biochemistry

Receptor Function and Regulation

Regulation of Gene Expression

Structural Biology

As a Post Doctoral Researcher at OHSU you will be a member of a rapidly growing scientific community at the forefront of modern biochemical and biological research. We are a highly interactive Department in one of the most desirable cities in the U.S.

Research fellowships are available with the following mentors. Please apply via email directly to the faculty member listed below sending a CV and the names of three references:

Richard Brennan, Ph.D.

Structural studies on bacterial virulence & multidrug resistance, structure-based drug design
Brennanr@ohsu.edu

Gail Clinton, Ph.D.

Biochemical and anti-tumor activity of the HER-2/neu receptor tyrosine kinase, herstatin Clinton@ohsu.edu

John Denu, Ph.D.

Molecular mechanisms of reversible histone/protein acetylation Denuj@ohsu.edu

David Farrens, Ph.D.

Physical and biochemical studies of G-Protein coupled receptors Farrensd@ohsu.edu

Jack Kaplan, Ph.D.,F.R.S.

P-type ATPase structure-function assembly and trafficking Kaplanj@ohsu.edu

Elaine Lewis, Ph.D.

Regulation of neuroendocrine gene expression Lewis@ohsu.edu

Hua Lu, Ph.D.

Regulation of p53 and its homologs Luh@ohsu.edu

Svetlana Lutsenko, Ph.D.

Copper transport: molecular and cellular mechanisms
Lutsenko@ohsu.edu

OHSU, Dept. of Biochemistry And Molecular Biology 3181 SW Sam Jackson Park Rd. Portland, Oregon 97201

New Research Initiative-Endocrine Pancreas/Beta Cells-Tenure Track Positions

The Diabetes Branch of the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), National Institutes of Health (NIH) invites applications for tenure track positions for scientists in research involving the endocrine pancreas/beta cells of the islets of Langerhans. Specific areas of research interest includes: pancreatic islet stem/progenitor cells; beta cel development; regulation of beta cell gene expression; and beta cell signaling. Priority will be given to applicants at the Assistant Professor level at traditional universities or those finishing their post-doctoral positions. The applicant must have a proven record of accomplishments and will be expected to propose and pursue and independent research program in one of these fields. These positions offer unparalleled opportunities for interdisciplinary collaboration within NIDDK and throughout

The Diabetes Branch of NIDDK is located on the main intramural campus of the NIH in Bethesda, Maryland, a suburb of Washington, D.C.

Interested applicants should send a Curriculum Vitae and a list of publications, copies of three major publications, a summary of research accomplishments, a plan for future research and three letters of recommendation to:

Dr. Jurrien Dean, Chair, Search Committee, Laboratory of Cellular and Developmental Biology, NIDDK, Building 6, Room B1-28, NIH, Bethesda, MD 20892. The closing date for all applications to be submitted is **March 30, 2001**.

NIH is an Equal Opportunity Employer

National Center for Research Resources (NCRR) - National Institutes of Health



NCRR: Catalyst for Discovery

Associate Director for Clinical Research

The National Center for Research Resources (NCRR) invites applications for the position of Associate Director for Clinical Research (ADCR), NCRR, NIH. One of the four NCRR research areas, the Clinical Research area establishes and supports specialized multi-disciplinary laboratories and shared resources for clinical research; supports specially adapted and professionally staffed clinical research environments; and supports clinical research training and career development of physicians and dentists to become independent clinical investigators. The ADCR serves as a member of the senior leadership of the Center and is responsible for planning, formulation, program review, development, and evaluation of all programs encompassed by the Clinical Research (CR) area, and in the overall administration of the CR area, and will have supervisory authority over administrative and scientific staff. Direction of the CR area includes three complementary sets of programs: 1) a national network of about 75-80 General Clinical Research Centers; 2) a portfolio of regional and national research resources to foster clinical research; and 3) a portfolio of programs for enhancing the interests of medical students in clinical research; career development of young promising physicians; and providing protected time for established clinical investigators. Qualified applicants must possess an M.D. or equivalent combination of experience and training. Candidates must be established scientists with considerable experience in clinical research; be nationally recognized for scientific achievements by the scientific community and considered an authority in his/her scientific field.

To view the full text vacancy announcement and requirements, applicants are strongly encouraged to access the NIH automated vacancy retrieval system at http://careerhere.nih.gov and view vacancies within the National Center for Research Resources. Total salary is competitive and will be commensurate with experience of the selectee. Send applications to National Institutes of Health, National Center for Research Resources (NCRR), 31 Center Drive, MSC 2131, Bethesda, MD 20892. For additional information contact the NCRR Personnel Office on (301) 496-1524. Deadline for applications is 3/18/01. https://public.Health.Service.Commissioned Officers interested in performing the duties of the position within the Commissioned Corps may submit a resume to the above address.

NIH is an Equal Opportunity Employer

PLANT ECOLOGIST TENURE-TRACK POSITION University of Montana

The Division of Biological Sciences invites applications for a tenure-track ASSISTANT/ASSOCIATE PROFESSOR position in plant ecology to join a dynamic group of Plant, Animal, and Microbial Ecologists and Evolutionary Biologists (start date: August 2001). The successful candidate is expected to develop a vigorous, externally funded research program that incorporates evolutionary perspectives or approaches into the study of plant ecology; to interact with other faculty and students (see website: http:// umt.edu/biology/dbs); and to mentor undergraduate and graduate students. We are especially interested in candidates whose research complements current strengths in functional plant ecology. Teaching expectations include participating in the undergraduate plant biology core program and offering advanced and graduate courses in areas of specialty. Requirements include a Doctoral degree, significant plant sciences background, a strong record of research accomplishments, postdoctoral experience, and teaching interest. Competitive start-up package available. Send letter of application, curriculum vitae, statement of research goals, teaching interests and philosophy, and three letters of reference to: Dr. Ragan Callaway, Chair, Plant Ecologist Search Committee, Division of Biological Sciences, The University of Montana, Missoula, MT 59812. Telephone: 406-243-5122; FAX: 406-243-4184. To receive full consideration, completed applications should be received by March 19, 2001. The University of Montana is an Affirmative Action/Equal Opportunity Employer. We encourage applications from well-qualified women, minorities, veterans, and persons with disabilities. Position is eligible for veteran's preference in accordance with state law.

CURATORIAL/RESEARCH ASSOCIATE Ornithology and Mammalogy Collections Department of Ecology and Evolutionary Biology

The Cornell University Museum of Vertebrates is seeking to fill a Curatorial/Research Associate position in the Ornithology and Mammalogy Collections, Department of Ecology and Evolutionary Biology, starting July 2001 or as negotiated. In 2002, the Museum will move to a new facility with laboratories for teaching, specimen preparation, and molecular systematics. Applicants should have a Ph.D. in ornithology, mammalogy, or related area; have broad knowledge of birds and/or mammals; and have experience working with systematic collections. The successful candidate will be expected to maintain an active research program (40% effort) in collections based research and manage the Ornithology and Mammalogy collections (60% effort) including supervision of a half-time assistant. Applications will be reviewed beginning March 26, 2001, and continue until a suitable candidate is found. To apply, send curriculum vitae and statements of collections experience and research interests and have three letters of recommendation sent to:

Dr. David W. Winkler
Chair, Ornithology/Mammalogy
Search Committee
Department of Ecology and Evolutionary Biology
Corson Hall, Cornell University
Ithaca, NY 14853
Telephone: 607-254-4230

Cornell University is an Equal Opportunity/Affirmative Action Employer. Applications from women and minorities are encouraged.

The University of Hawaii is seeking an ASSIST-ANT SPECIALIST, Position Number 086165T, as Secretariat for Conservation Biology to facilitate coperation among partners. See website: http://www.hawaii.edu/scb.about.htm. M.S. in appropriate area of biology plus 30 additional credits of graduate studies and knowledge of conservation issues required. For full position description and requirements, send e-mail to: kykanesh@hawaii.edu. Closing date: February 28, 2001. Equal Employment Opportunity/Affirmative Action Institution.

POSITIONS OPEN

CELLULAR/MOLECULAR TOXICOLOGIST University of Mississippi Medical Center Department of Pharmacology and Toxicology

The Department of Pharmacology and Toxicology invites applications for a TENURE-TRACK POSITION that will be available July 1, 2001. Rank of entry will be commensurate with qualifications of the applicant. Candidates will be expected to develop a strong, extramurally funded research program in the general area of toxicology. The research would have an emphasis on cellular and/or molecular biology mechanisms of action of xenobiotics complementary to current research in the Department. The candidate also will participate in the teaching of graduate, medical, and dental students.

The minimum qualifications for applicants are a Ph.D. or equivalent in toxicology, pharmacology, biochemistry, or a related field and one to two years of postdoctoral experience. Applicants should submit curriculum vitae and a description of future research plans and teaching interests by June 1, 2001, to:

Chairman, Faculty Search Committee Department of Pharmacology and Toxicology University of Mississippi Medical Center 2500 North State Street Jackson, MS 39216-4505

In addition, the applicant should request three letters of recommendation be sent directly to the above address. Equal Opportunity Employer; Minorities/Females/Disabled/Veterans.

ASSISTANT/ASSOCIATE PROFESSOR PLANT PATHOLOGY

The Department of Plant Pathology at The University of Georgia. Athens, invites applications for a 12month tenure-track faculty position at the level of Assistant or Associate Professor with a starting date of 1 July 2001. We seek an individual with contemporary molecular expertise to develop a creative, externally funded research program on mechanisms of plant disease resistance and/or host-pathogen interaction with emphasis on developing innovative strategies to enhance plant resistance. Responsibilities include training of graduate students and participating in teaching in his/her area of expertise. The appropriate incumbent will be provided space in a new 40,000 square foot Applied Genetic Technology Resource building. A Ph.D. in plant pathology or related discipline is required and postdoctoral experience is desirable. Submit a cover letter, curriculum vitae, a oneto-two-page statement of research and teaching interests, copies of no more than five publications, and a list of names and contact information for four professional references. Applications received by 2 April 2001 are assured full consideration. Material should be sent to: Dr. Richard S. Hussey, Chair, Plant Pathology Search Committee, Department of Plant Pathology, 2105 Miller Plant Sciences Building, University of Georgia, Athens, GA 30602-7274. E-mail: hussey@uga.edu. The University of Georgia and Committee sity of Georgia is an Equal Opportunity/Affirmative Action Employer

NEUROBIOLOGY RESEARCH ASSOCI-ATE (two positions). Ph.D. in neurobiology or related field required. Postdoctoral experience preferred Salary: \$2,736/month, funded by NIH research grants to Joe L. Martinez, Jr. Both are focused towards understanding the neurobiology of learning and memory; one focuses on opioids, one on intergrins. Methods employed include behavior, field and patch clamp recording in hippocampus, and gene reg-ulation studied through DNA microchip array technology. One position seeks someone with experience in grant and manuscript writing and laboratory administration; one seeks an Electrophysiologist. Send employment application, curriculum vitae, three publications, and names of references to: Office of Human Resources, The University of Texas at San Antonio, 6900 North Loop 1604 West, San Antonio, TX 78249. Telephone: 210-458-4250; website: www.utsa.edu. Closing date is March 16, 2001

UTSA is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

POSITIONS OPEN

EXECUTIVE DIRECTOR Great Lakes Institute for Environmental Research University of Windsor

The University of Windsor is seeking an exceptional individual with the vision, dedication, and energy to lead the Great Lakes Institute for Environmental Research (GLIER) in developing it further as a broadly based, internationally recognized research institute, fulfilling the University's goal of achieving excellence in environmental studies.

GLIER is a research and graduate education unit of the University of Windsor, dedicated to interdisciplinary, collaborative, environmental research. Additional information about GLIER is available at website: www.uwindsor.ca/glier.

The successful candidate for this exciting role will possess an established research reputation and demonstrated leadership and executive-level administrative skills. In addition, candidates should have excellent communication and interpersonal skills combined with a talent for entrepreneurship.

The initial appointment is for five years and is renewable for a second term. For more detailed information, a position profile, and application submission requirements, please contact the address shown below or consult website: www.uwindsor.ca/facultypositions.

Janet Wright and Associates Inc. 21 Bedford Road, Suite 300 Toronto, Ontario M5R 2J9 Canada FAX: 416-923-8311 E-mail: resumes@jwasearch.com

The University of Windsor is committed to Equity and diversity in the workplace and welcomes applications from aboriginal persons, persons with disabilities, and members of visible minorities. Applications from women are particularly encouraged.

PHARMACOLOGY FACULTY POSITION

The Department of Pharmacology at the University of South Alabama College of Medicine invites applications for a FACULTY POSITION with rank and tenure status commensurate with experience. Qualified candidates should have a Ph.D. degree in pharmacology or a related biomedical science and at least two years of postdoctoral experience. Although individuals with research credentials broadly related to pharmacology are encouraged to apply, we are especially interested in candidates with expertise in signal transduction related to cancer, vascular, or respiratory biology. The Department consists of nine funded Scientists with active research programs in molecular, biochemical, and cellular pharmacology. In addition to excellent laboratory space, core equipment, and start-up support, there are exceptional opportunities for collaborative research within the Department and elsewhere in the medical school. The greater Mobile area boasts close proximity to beautiful Gulf Coast beaches and numerous opportunities for outdoor recreation and cultural enrichment. Direct inquiries and applications to

Mark N. Gillespie, Ph.D.
Professor and Chairman
Department of Pharmacology
University of South Alabama College of Medicine
Mobile, AL 36688-0002

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

Harvard Medical POSTDOCTORAL POSITION. Exciting research on the structure, function, and cell biology of integrins, IgSF, and selectin adhesion molecules. Special topics include structural changes in integrins that are regulated by signals within the cell and how selectins mediate force-resistant interactions in the vasculature. Strong backgrounds in structural or computational biology, protein chemistry, cell biology, biophysics, and/or bioengineering are particularly sought. Good command of English required. Apply to: Timothy A. Springer; address and further information are at website: http://sprsgi.med.harvard.edu.

INSTITUTE OF MOLECULAR & CELL BIOLOGY, SINGAPORE PRINCIPAL INVESTIGATORS & YOUNG INVESTIGATORS POSTDOCTORAL FELLOWS

Singapore is recognized as a hub for research and is investing heavily in the life sciences and biomedical research. The Institute of Molecular and Cell Biology (IMCB) Singapore, is a major center for research that is currently undergoing an expansion into a new wing. As part of the IMCB's expansion program, we are now inviting applications from talented and highly motivated individuals with a strong track record of international publications to build worldclass research groups and conduct innovative research in any area of biology, preferably in immunology, neurobiology, genetics, or molecular, cellular or developmental biology of vertebrates. We also seek postdoctoral fellows with interest and experience in the above fields.

Advantages of the appointments include opportunities for career advancement, fully funded research programs, collaborations and overseas conference travel, superb laboratory and computing facilities, and few of the distractions normally associated with academic appointments.

Principal Investigators:

Independent researchers appointed at the level of Assistant Professor to Full Professor. Contracts are for three to five years, renewable. Laboratory space of approximately 500 to 1000 square feet (excluding office or writing space), and 7 to 14 staff come with the appointment. Salary is negotiable.

Young Investigators:

Independent researchers appointed at the level of Assistant Professor. Candidates should be less than 35 years old and have up to three years postdoctoral research experience. Contracts are for a term of six years. Laboratory space of approximately 250 square feet (excluding office or writing space) is provided. Three positions (typically one postdoctoral fellow, one graduate student and one technician) come with the appointment.

Postdoctoral Fellows:

Applicants should have an international publication record. Contracts are for up to three years in the first instance, and there are good opportunities for career advancement.

For all appointments, an extremely attractive and competitive remuneration package is offered, which includes a substantial gratuity payment on completion of the expatriate contract, medical cover, and a settling-in allowance. For more detailed information about the IMCB, visit our web site at www.imcb.nus.edu.sg Applicants should post, fax or e-mail their curriculum vitae, together with the names of three referees, to: The Director, Institute of Molecular and Cell Biology, An institute affiliated to The National University of Singapore, 30 Medical Drive, Singapore 117609, Republic of Singapore. Fax: Singapore 779-1117; email: recruit@imcb.nus.edu.sg

May 13-18, 2001

Orlando, Florida

International Symposium on Applications of Enzymes in Chemical and Biological Defense

13-18 May, 2001 Sheraton World Resort Orlando, Florida

- Presentations on the latest research on both medical and non-medical applications of enzymes
- Emphasis on enzymatic reactions with biological and chemical warfare agents, carbamate and organophosphorus pesticides, and related materials
- Topic areas: protection, detection, decontamination, prophylaxis and treatment

Open to government agencies, academia and industry.

Sponsored by:

- U.S. Army Soldier and Biological Chemical Command (SBCCOM)
- U.S. Army Research Office (ARO)
- U.S. Army Medical Research and Material Command (MRMC)
- Defense Advanced Research Projects Agency (DARPA)

At this time, papers and posters are still being accepted. For an announcement on papers and posters or a registration packet, please contact:

Debbie Bilotto Tel: 410.612.8247 Fax: 410.612.9968

E-mail: bilotto deborah@bah.com

A block of rooms has been reserved under Enzyme Symposium at the host facility, Sheraton World Resort, 10100 International Drive, Orlando, Florida 32821.

Reservations are to be made by calling 1-800-327-0363. Please identify yourself as attending the Enzyme Symposium when you call. Space is limited and will be distributed on a first-come, first-serve basis. All reservations should be made by 13 April, 2001. Room rate will be \$86.00 per night.

RESEARCH SCIENTIST GENETIC ENGINEERING PROTEIN STRUCTURE/FUNCTION

USB Corporation, a leader in the development of enzymes for genetic analysis, has recently received Ohio's Thomas Edison Emerging Technology Award for excellence, innovation, and growth. To further expand our capabilities in the areas of enzymology and genetic engineering, USB is seeking to fill several positions in our Research and Development Department. Individuals who have an in-depth knowledge of genetic engineering or protein structure/function analysis and who enjoy developing cutting-edge technology are encouraged to apply. Candidates must have a Ph.D. with applicable postdoctoral experience. Positions are available at several levels of seniority. Successful candidates will be joining a team of Scientists who are inventing the technologies, engineering the enzymes, and commercializing the products required to meet the needs of leading Scientists and the future biotechnology and diagnostic industries. Salary is highly competitive with a full range of benefits and 401(k) plan offered.

Applicants must submit the names and telephone numbers of at least three references along with curriculum vitae to:

> USB Corporation 26111 Miles Road Cleveland, OH 44128 Attention: Human Resources

ASSISTANT/ASSOCIATE PROFESSOR CELL BIOLOGY/MOLECULAR BIOLOGY Queens College of the City University of New York

The Department of Biology at Queens College of the City University of New York seeks a tenure-track Assistant or Associate Professor to begin fall 2001 Responsibilities will include the establishment of an active research program and teaching at the undergraduate and M.A./Ph.D. levels. We seek a candidate with a Doctoral degree, postdoctoral experience, and a record of research accomplishment in the areas of cell biology and/or molecular biology. Salary range for Assistant Professor is \$32,062 to \$55,930; Associate Professor is \$41,780 to \$66,837 commensurate with experience. Send a letter detailing research interests/future plans, curriculum vitae, and arrange for submission of three letters of recommendation. Complete applications, including recommendation letters, must be received by April 19, 2001. Candidates should submit materials to: Dr. Corinne Michels, Chair, Search Committee Department of Biology, Queens College of CUNY, 65-30 Kissena Boulevard, Flushing, NY 11367-1597. An Equal Opportunity/Affirmative Action/IRCA/Americans With Disabilities Act Employer.

PROGRAM OFFICER

The Humane Society of the United States seeks Program Officer for animal research issues. Focus on issues involving use of animals in education and training programs, outreach efforts to students on animal research issues, and promotion of higher educational courses. Qualifications: advanced degree with experience in life sciences, strong writing and speaking skills, and ability to travel. Salary in the low \$40,000 range. Send cover letter with résumé to: The HSUS, Attention: HR/PO, 700 Professional Drive, Gaithersburg, MD 20879. FAX: 301-548-7701; e-mail: lboan@hsus.org.

Tenure-track ASSISTANT PROFESSOR of biology teaching genetics, cell/molecular, general education biology, one other course, laboratories, plus coteaching biochemistry. A commitment to student-centered undergraduate liberal arts education is essential. See website: www.antioch-college.edu/admin; send letter of interest, curriculum vitae, three letters of reference, transcripts, to: Biology Search Committee, Human Resources Department, Antioch College, P.O. Box 465, Yellow Springs, OH 45387. Review begins March 7, 2001. Equal Opportunity Employer.

POSITIONS OPEN

The Institute for Tropospheric Research (IfT), Leipzig, Germany, invites applications for THREE FULL-TIME RESEARCH POSITIONS in the field of experimental aerosol and cloud physics. The positions are open immediately. The appointments will be for three years, extension possible; probationary period is for six months. Main objectives of the laboratory experiments are the understanding of the interactions between aerosol particles and clouds. This task will be achieved by a cooperation of all departments of the IfT, whose focus is aerosol/cloud physics and chemistry. For further information, see website: http://www.tropos.de.

Position One. Cloud Physics Specialist. Tasks are to plan, organize, and conduct experimental studies on aerosol and cloud microphysics; to analyze results of numerical modeling exercises. Requirements: Ph.D. degree with specialization in atmospheric physics, physics, engineering, chemistry, or a related field. Experience: experimental physics or experimental chemical engineering and environmental applications. Must communicate effectively in English orally and in writing. For further information, please contact: Professor Jost Heintzenberg; Telephone: +49 (0)341 2352321; e-mail: jost@tropos.de.

Position Two. Tasks are the experimental investigation of the growth of aerosol particles by water vapor condensation and drop formation. This includes both the construction of the laboratory experiment and measurements. Knowledge in experimental thermodynamics and fluid dynamics is required. For further information, please contact: Dr. Frank Stratmann; Telephone: +49 (0)341 2352862; e-mail: straddi@tropos.de.

Position Three. Tasks are to develop and implement optical measurements of the condensational growth of aerosol particles and droplets. Knowledge in optical detection methods is required. For further information, please contact: Dr. Manfred Wendisch; Telephone: +49 (0)341 2352469; e-mail: wendisch@tropos.de.

Requirements for Positions Two and Three: M.S. in physics, atmospheric physics, chemistry, engineering, or a related field. Knowledge: aerosol and cloud microphysics. Language: German or English. We offer the opportunity to obtain a Ph.D. Salary is German legal salary scale Bat-O Ila (in the range of 4,700 to 5,800 DM brutto per month) for public servants with a university degree. Applications with curriculum vitae, publication list, and the usual material to: Professor Jost Heintzenberg, Institute for Tropospheric Research, Permoserstrasse 15 04318, Leipzig, Germany. The IfT is an Equal Opportunity Employer. The IfT encourages women to apply for these positions.

The National Cancer Institute at the National Institutes of Health is seeking to fill a POSTDOC-TORAL POSITION in the HIV and AIDS malignancy branch. This position is available immediately to study human papillomavirus infection and gene expression in AIDS patients. The applicant must have a Ph.D. or M.D. and no more than five years of postdoctoral experience; previous experience in molecular virology, biochemistry, or molecular biology is strongly required. Appointment duration is for three years renewed on a yearly basis with a stipend of \$31,500 plus health insurance coverage. Please send curriculum vitae and three references to: Dr. Zhi-Ming Zheng, HAMB, 10 Center Drive MSC 1868, Room 10S255, Bethesda, MD 20892-1868. Telephone: 301-594-1382; FAX: 301-480-8250; e-mail: zhengt@exchange.nih.gov; website: http://www-dcs.nci.nih.gov/resdir/ person_index.cfm?p id=117. The National Cancer Institute is an Equal Employment Opportunity and Affirmative Action Employer.

POSTDOCTORAL POSITION

NIH-supported RESEARCH ASSOCIATE position available immediately to study novel functions of LCAT in lipoprotein metabolism. Experience in cell and molecular biology techniques required. Send curriculum vitae and list of references to: Dr. Papasani V. Subbaiah, Rush Medical College, 1653 West Congress Parkway, Chicago, IL 60612. E-mail: psubbaia@rush.edu; FAX: 312-942-8233.

POSITIONS OPEN

RESEARCH LEADERS
WRRC, ALBANY, CALIFORNIA
Supervisory Research Chemist/Research
Engineer/Plant Physiologist/Research Food
Technologist (Interdisciplinary)

The U.S. Department of Agriculture, Agricultural Research Service, Cereal Product Utilization Unit, Western Regional Research Center, Albany, California (located in the San Francisco Bay area), invites applications for the position of **RESEARCH LEADER**, GS-14/15 (\$79,271 to \$121,218 per annum; salary commensurate with experience). The Research Leader will lead a dynamic 13-Scientist team to address marketability and healthfulness of agricultural commodities and processed products. Cereal grains, legumes, fruits, nuts, and vegetables are the focus of research, which includes both basic and applied aspects. The Research Leader also conducts a personal research program. A Ph.D. or equivalent in physical sciences, life sciences, engineering, botany, plant physiology, food technology, microbiology, chemistry, physics, or a related discipline or field of biological or physical sciences or engineering and one year of specialized experience in cereal chemistry and technology is required. This is a competitive, permanent appointment and U.S. citizenship is required. A complete copy of the vacancy announcement and where to apply can be found at website: http://www.ars.usda.gov/asm/hrd/vacancy/vac2.html; select Announcement ARS-X1W-1187 or contact: Personnel; Telephone: 510-559-6090. Closing date for applications is March 26, 2001. For more detailed information on the position responsibilities, please contact: **Dr. James Seiber; Telephone:** 510-559-5600. The USDA is an Equal Opportunity Provider and Employer.

SUPERVISORY CHEMICAL ENGINEER/BIOCHEMICAL ENGINEER/ MATERIALS ENGINEER/RESEARCH CHEMIST (Interdisciplinary)

The U.S. Department of Agriculture, Agricultural Research Service, Process Chemistry and Engineering Research Unit, Western Regional Research Center, Albany, California (located in the San Francisco Bay area), invites applications for the position of **RE-SEARCH LEADER**, GS-14/15 (\$79,271 to \$121,218 per annum; salary commensurate with experience). The Research Leader will lead a dynamic team of 10 Scientists and Engineers to address expanded utilization and improved quality of crop plantbased foods and industrial products, including creating new uses as biobased products and biofuels. The Research Leader also conducts a personal research program. A Ph.D. or equivalent is required in chemistry, physics, engineering, or biological sciences with a strong chemistry or engineering component and one year of specialized experience in cereal chemistry and technology. This is a competitive, permanent appointment and U.S. citizenship is required. A complete copy of the vacancy announcement and where to apply can be found at website: http://www.ars.usda.gov/asm/ hrd/vacancy/vac2.html; select Announcement ARS-X1W-1187 or contact: Personnel; Telephone: **510-559-6090**. Closing date for applications is March 26, 2001. For more detailed information on the position responsibilities, please contact: Dr. James Seiber, Telephone: 510-559-5600. The USDA is an Equal Opportunity Provider and Employer

POSTDOCTORAL POSITIONS AT NOTRE DAME Structural Studies of Oligosaccharides

Two NIH-funded Postdoctoral positions are available immediately in the area of oligosaccharide structure determination. Successful candidates will have Ph.D. training in oligosaccharide snythesis (chemical/enzymic). NMR/X-ray crystallography and/or computational chemistry (electronic structure/MD). Experience with isotopic labeling is desirable. Send curriculum vitae and names/addresses of three references to: Professor Anthony S. Serianni, Department of Chemistry and Biochemistry, University of Notre Dame, Notre Dame, IN 46556-5670. E-mail: serianni.1@nd.edu: website: www.nd.edu/~aseriann. The University of Notre Dame is an Equal Opportunity/Affirmative Action Employer.

Full/Associate Professor Evelyn F. McKnight Chair for Brain Research in Memory Loss Evelyn F. & William L. McKnight Brain Institute of the University of Florida

The Evelyn F. & William L. McKnight Brain Institute of the University of Florida, is seeking an outstanding scientist for a tenure track faculty position at the Full/ Associate Professor level to fill the Evelyn F. McKnight Chair for Brain Research in Memory Loss. All candidates must have a Ph.D., M.D., or M.D./Ph.D. The successful candidate will receive a faculty appointment in the University of Florida College of Medicine and will be expected to have and to maintain an outstanding and well-funded research program in the fundamental mechanisms that underlie the neurobiology of memory. Areas of research that will be considered include a broad range of basic studies employing molecular, cellular, and/or systems approaches and have clinical relevance to problems of age-related memory loss. Research programs exclusively focusing on Alzheimer's disease cannot be considered. The candidate will also be expected to contribute to the education of both graduate and medical students. The salary is negotiable and will be commensurate with related experience. Laboratory and office space for this position will be provided in the new stateof-the-art Evelyn F. & William L. McKnight Brain Institute Building (http://www.mbi.ufl.edu). Applicants should submit curriculum vitae, a clear statement of research goals and the names of three references to: Ronald L. Hayes, Ph.D., Chair of Search Committee, Evelyn F. and William L. McKnight Brain Institute of the University of Florida, Department of Neuroscience, 100 Newell Dr./P.O. Box 100244, Gainesville, FL 32610, T: 352-392-6850 F: 352-392-8347, Email: hayes@mbi.ufledu. The completed application should be received by March 15, 2001, with an anticipated start date on or after June 2001. The University of Florida is an Equal Opportunity Employer, and minorities and women are especially encouraged to apply.

ANNOUNCEMENTS

ACADEMY OF MOLECULAR IMAGING (AMI)

AMI is composed of the Institute for Molecular Imaging, the Institute for Clinical PET and the Industry Council.

AMI's primary focus is:

- Molecular imaging technologies such as PET, MRI/MRS, SPECT, optical imaging, autoradiography, and acoustical imaging
- Molecular assays of biological processes, from blood flow and metabolism to signal transduction and gene expression
- In vivo molecular imaging from mouse to patient
- Merging technologies including multimodality instrumentation, reporter genes with multiple reporters, drug and imaging probe discovery
- Clinical molecular imaging of the biological basis of disease
- Education in principles of molecular imaging

AMI Annual Meeting

Date: October 24-28, 2001

Place: Hyatt Regency Grand Cypress Resort, Orlando, Florida

Call for Abstracts: July 16, 2001

For conference and membership information contact:

Academy of Molecular Imaging Phone toll-free: (866) 738-7226 www.ami-imaging.org



ASSISTANT PROFESSOR OF MEDICAL EDUCATION IN MICROBIOLOGY

University of Virginia School of Medicine

Tenure-ineligible faculty position available for Course Coordinator of Medical Microbiology course. This position requires an individual with experience in medical microbiology or immunology and exceptional organizational and communication skills. The position involves scheduling; preparation and distribution of course materials; development and maintenance of course web page; preparation, coordination and participation in the laboratory section of the course; and organization of small-group instruction. The coordinator will organize meetings of the teaching faculty and act as a resource in the planning of the different sections of the course and in integrating the course with other courses taught to second-year medical students. The coordinator will prepare and administer course evaluations and administer exams. In addition, the coordinator will act as a resource to the students by managing the course message boards and newsgroups, preparing and disseminating grades and makeup exams, and counseling students on effective study strategies. The coordinator will act as an educational resource to the faculty lecturing in the course, providing both technical support with audiovisual materials and research support by suggesting current and relevant teaching materials, including images movies, journal articles and texts.

The successful candidate will hold a PhD in Microbiology or Immunology and have demonstrated excellence in teaching at the graduate level. Experience in web site design/development and development of a/v presentations required, including HTML, Dreamweaver, Flash, Fireworks, Photoshop and MS Office. Experience teaching Medical Microbiology including bacteriology laboratory preferred

If interested please send cover letter, curriculum vitae, and names and addresses of 3 references by March 16, 2001 to: Search Committee, Attn: Elizabeth Hupp, Department of Microbiology, University of Virginia School of Medicine, Box 800734 Health System, Charlottesville, VA 22908. Email: ehh2e@virginia.edu. Fax: 804-982-1071. The University of Virginia is an equal opportunity/affirmative action employer.

APPLYING WHAT YOU HAVE LEARNED DOES NOT MEAN YOU STOP LEARNING

If you want to apply your skills in the world of business, then here is an opportunity for you to enrich our gene pool. BCG is the world's leading strategic business consulting firm. We pride ourselves on working with our clients to develop business strategies that go far beyond the obvious. BCG is a learning environment in which each project profits from and feeds into a pool of knowledge and experience, forming a perpetual learning circle. This is the basis upon which we develop the innovative solutions for which we are known.

We recruit from all disciplines, and are looking for outstanding all-rounders with excellent academic backgrounds. Applicants will be completing PhDs, or will have completed PhDs within the last 6 years.

For North American positions, apply online via www.bcg.com. For the UK, send CV and covering letter to: Jacqui Orr, BCG, Devonshire House, Mayfair Place, London, W1X 5FH. For the rest of the world, contact your preferred office (see www.bcg.com)

www.bcg.com

BCG

THE BOSTON CONSULTING GROUP

ECOLOGIST

The Biology Department and the Environmental Studies Program (ESP) of Brandeis University seek a full-time **LECTURER** in ecology starting in September of 2001. This will be a one-year, renewable appointment.

The successful candidate will hold a Ph.D. degree with research interests in a branch of aquatic, terrestrial, or landscape ecology. Teaching duties comprise two courses per semester including an introductory ecology/conservation biology course for students in ESP and a mix of upper-level electives for biology majors and ESP students that reflects the candidate's experience and research interests.

experience and research interests.

Brandeis University places emphasis on interdisciplinary programs, and the Lecturer in ecology will become an active participant in the advising of students, supervision of senior theses, and development of the curriculum in the ESP. The molecular and cellular orientation of the Biology Department and its strong program in neurobiology provide additional opportunities around which to plan advanced elective courses.

Send your application outlining interests and evidence of effective undergraduate teaching along with curriculum vitae and the names of three references to:

Attila O. Klein, Ecologist Search Biology Department, MS Number 008 Brandeis University Waltham, MA 02254-9110 Website: www.bio.brandeis.ed

Review of applications will begin 9 March 2001 and continue until the position is filled.

Brandeis is an Equal Opportunity/Assirmative Action Employer. We encourage applications from women and minorities.

MOLECULAR BIOLOGIST (Plant Breeding) GS-401-11/12/13 U.S. Department of Agriculture Agriculture Research Service

The Plant Genetic Resources Unit located in Geneva, New York, is seeking to fill a permanent, full-time Molecular Biologist (Plant Breeding) GS-11/12/ 13 position to develop molecular approaches to the breeding, characterization, and evaluation of scion varieties for the northeastern United States for improved fruit, juice, and wine quality; abiotic stress tolerance; and disease and insect resistance. Collaboration with other U.S. Department of Agriculture and university Scientists across a wide range of scientific disciplines including horticulture, plant pathology, entomology, food science, and applied plant genomics is essential. For more information on the research program, contact: Dr. Warren F. Lamboy; Telephone: 315-787-2359. For a copy of the vacancy announcement/application forms, call Tiffany Fisk; Telephone: 315-787-2307; website: http://www. ars.usda.gov/afm/hrd/resjobs/index.html. Applications should be marked ARS-X1E-1135 and must be postmarked by March 19, 2001. USDA is an Equal Opportunity Provider and Employer. Women and minorities are encouraged to apply.

SCIENTIFIC RESEARCH

The following full-time, immediately available Ph.D. Scientist positions in support of the development of novel polyamine and iron chelator therapeutics are available:

BIOCHEMICAL PHARMACOLOGIST: This individual will develop biochemical procedures, e.g., ELISA, enzymatic measurements, and transport assays.

BIOORGANIC CHEMIST: The successful candidate will devise methods for the assessment of oxidative tissue damage mediated by iron.

Please send résumé to: Tim Vinson, University of Florida, P.O. Box 100485, Gainesville, FL 32610-0485. FAX: 352-392-8046; e-mail: vinson@mc.cop.ufl.edu. No telephone calls, please.

POSITIONS OPEN



SUPERVISORY PLANT PHYSIOLOGIST or SUPERVISORY RESEARCH CHEMIST or SUPERVISORY RESEARCH GENETICIST

(Plants) (Interdisciplinary)

The U.S. Department of Agriculture, Agriculture Research Service, Wheat Genetics, Quality, Physiology, and Plant Disease Research Unit, Pullman, Washington (located on the campus of Washington State University), invites applications for the position of RESEARCH LEADER, GS-14/15 (\$70,457 to \$107,738 per annum; salary commensurate with experience). The Research Leader will lead a dynamic five-Scientist team to address issues important in the production of wheat germ plasm and varieties with improved yield, agronomic characteristics, pest and disease resistance, and milling and quality for endproduct utilization. The Research Leader also conducts a personal research program. A Ph.D. or equivalent in plant physiology, biochemistry, molecular biology, cereal chemistry, plant genetics, or a closely related field is desired. This is a competitive, permanent appointment and U.S. citizenship is required. Applications must be marked ARS-X1W-1101. For specific application procedures and requirements, please call Ms. Pamela Dean; Telephone: 509-335-3238; e-mail: pdemes@wsu.edu. You may obtain a copy of the vacancy announcement from Ms. Dean or from the ARS website: http://www.ars.usda.gov/afm/hrd/resjobs/index.html under announcement ARS-X1W-1101. Applications must be postmarked by February 26, 2001. ARS is an Equal Opportunity Provider and Employer. Women and minorities are encouraged to apply.

HENRY FORD HEALTH SYSTEM

TWO EXPERIENCED VIROLOGISTS wanted: The Infectious Disease Research Laboratory at Henry Ford Hospital is a large laboratory that is supported by NIH funding and several commercial contracts. The main area of interest of the laboratory is the development of new antiviral agents and identification of the genetic and structural mechanisms of antiviral drug resistance. The laboratory is looking to expand by hiring two additional Virologists or MO-LECULAR BIOLOGISTS with interest and experience with one of the following viruses: HIV, HCV, HSV, or HPV. Candidates must have a Ph.D. in virology or related discipline and have significant experience conducting research on one of the above-mentioned viruses. Qualified candidates should also have a strong record of publication in the field of virology and show potential for planning and conducting a strong research program that attracts extramural funding. Successful candidates will be eligible for an academic appointment at Case Western Reserve University. Salary is competitive and will be commensurate with training and experience. Interested candidates should send cover letter describing research interests and goals, curriculum vitae, and contact information to:

Douglas Mayers, M.D.
Division of Infectious Diseases
Henry Ford Health System
2799 West Grand Boulevard, CFP102
Detroit, MI 48202
Telephone: 313-916-2573
FAX: 313-874-4677

IMAGING SCIENTIST POSITIONS

AccuImage Diagnostics Corporation (website: www.accuimage.com), a growing medical imaging workstation company based in South San Francisco, California, is looking for two Imaging Scientists to support new product development programs for CT and MRI applications. E-mail réumés and letter of interest to: Leon Kaufman, CEO; e-mail: kleon01@accuimage.com; FAX: 650-875-0194.

POSITIONS OPEN

SENIOR STAFF FELLOW IMMUNOLOGY

The Division of Bacterial, Parasitic, and Allergenic Products, Office of Vaccines Research and Review, Center for Biologics Evaluation and Research, Food and Drug Administration, has an immediate opening for a Senior Staff Fellow who would be expected to develop an independent program to study the immunology and protective immunity induced by bacterial polysaccharides and polysaccharide protein conjugates. These include Hib, meningococcal antigens, pneumococcal, and/or Group B streptococcal antigens. The selected candidate would also be expected to participate in review and regulation of bacterial polysaccharide-containing vaccines. The laboratories are located on the NIH campus in Bethesda, Maryland. The appointment is for an initial two-year period and may be extended up to a total of seven years by mutual agreement. This appointment is equivalent to a TENURE-TRACK APPOINTMENT, i.e., the candidate would be eligible for conversion to a permanent position if successful. Candidates must have an advanced degree, e.g., Ph.D. and at least two years of postdoctoral experience and must be either U.S. citizen or resident alien eligible for citizenship within four years. Salary range for candidates is from \$40,714 to \$80,658 per annum depending on training and experience. Candidates should send curriculum vitae, bibliography, statement of research interests, and names/contact information for three references to: Carl Frasch, Division of Bacterial, Parasitic, and Allergenic Products, Center for Biologics Evaluation and Research, HFM-428, 1401 Rockville Pike, Rockville, MD 20852.

SENIOR RESEARCHER

The Division of Clinical Perfusion Sciences at the University of Nebraska Medical Center (UNMC), Omaha, Nebraska, seeks applicants for the position of Senior Researcher in extracorporeal circulation and cardiovascular pathophysiology. This tenure-track faculty position will be at the ASSISTANT/ASSO-CIATE PROFESSOR level and will involve leadership in the Department's development of a nationally recognized, extramurally funded research program and the instruction of graduate-level perfusion students. Candidates must hold either a Ph.D. or M.D. Rank and salary are subject to applicant's qualifications. Applicants should send curriculum vitae, a detailed statement of research interests, representative reprints, and addresses of three references to: Search Committee, Division of Clinical Perfusion Sciences, 985155 Nebraska Medical Center, Omaha, NE 68198-5155. Website: www.unmc.edu/cpe/. The Search Committee will begin screening applicants March 1, 2001, and applications will be accepted until the position is filled.

Equal Employment Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

PLANT DEVELOPMENTAL AND CELLULAR BIOLOGY

We seek a Biologist using genetic, biochemical, and molecular approaches to study aspects of plant developmental and cellular biology. The appointment will be as a tenure-track ASSISTANT PROFESSOR in biology with the Developmental, Cellular, and Molecular Group to begin in September 2001. Successful candidates will be expected to develop an externally funded research program and to participate in teaching undergraduate and graduate courses. For more information, see website: http://www.biology.duke.edu. Applicants should provide (1) curriculum vitae, (2) a two-to-four-page description of research plans, (3) a one-page teaching statement, (4) reprints of recent papers, and (5) arrange for three letters of reference to be sent to: Plant Biologist Search, DCMB Group, B343, Levine Science Research Center, Box 91000, Duke University, Durham, NC 27708. Telephone: 919-613-8155. Review of all applications will begin on March 12, 2001. Duke University is an Affirmative Action/Equal Opportunity Employer.

ANNOUNCEMENTS



The Alexander von Humboldt Foundation is a non-profit foundation established by the Federal Republic of Germany for the promotion of international research cooperation. It enables highly qualified scientists and scholars not resident in Germany to spend extended periods of research in Germany and promotes the ensuing academic contacts.



2001 Opportunities

Humboldt Research Fellowships

for highly qualified scientists and scholars of all disciplines not resident in Germany, under 40 years of age and holding a doctorate, enabling them to undertake long-term research stays of 6 to 24 months in Germany (about 600 per year, applications accepted any time.)

Further Scholarships and Research Fellowships

for scientists and scholars especially from Middle and Eastern European Countries, Developing Countries, USA, Japan, and Germany

Humboldt Research Awards and Friedrich Wilhelm Bessel Research Awards (New!)*

for internationally recognized scientists and scholars of all disciplines and nationalities not resident in Germany (age limit for the Bessel Award: 45). The awards are endowed with up to DM 150,000 (approx. US\$ 66,000). It includes the invitation to undertake extended periods of research at German research institutes (4-12 months). Nomination deadlines: May 31/October 31, 2001.

Wolfgang Paul Award Program (New!)*

for internationally recognized scientists and scholars of all disciplines and nationalities not resident in Germany (age limit: generally 50). The award is endowed with up to DM 4,500,000 (approx. US\$ 2,000,000). It enables the recipients to establish their own research groups of highly qualified younger researchers in Germany between 2001 and 2003. Nomination deadline: April 30, 2001.

Kosmos Awards Program (New!)*

for internationally recognized young scientists and scholars of all disciplines and nationalities not resident in Germany (age limit: generally 35). The award is endowed with up to DM 2,250,000 (approx. US\$ 1,000,000). It enables the recipients to establish a group of young researchers in Germany between 2001 and 2003. Application deadlines: March 15/June 15, 2001.

*These programmes are sponsored by the "Investments in the Future Program" (ZIP) of the Federal Ministry of Education and Research (BMBF).

For further information please refer to: http://www.humboldt-foundation.de or contact select@avh.de

Alexander von Humboldt-Stiftung, Jean-Paul-Str. 12, D-53173 Bonn, phone: +49-(0)228-833-0, fax: +49-(0)228-833-199



Postdoctoral Fellow Immunology

SRI International has been the leading independent research & development organization in the Silicon Valley for over 50 years. SRI International continues to be committed to discovery and to the application of science and technology for knowledge, commerce, prosperity and peace. We are looking for a Postdoctoral Fellow - Immunology to join our Pharmaceutical Discovery Division. You will study the mechanisms that underlie auto-immune and inflammatory diseases and validate novel potential therapeutic targets for the prevention and treatment of these diseases in the laboratory of Dr. Annalisa D'Andrea. You will provide functional assays for the characterization of novel immunoregulatory cells; independently design & execute research; contribute to scientific literature & conferences; participate in the development of patent applications.

EXPERIENCE: Demonstrated expertise in cellular immunology including characterization of subpopulations lymphoid cells & experience in functional characterization of leukocytes are desirable; less than 5 years postdoctoral experience; expertise with basic bioinformatic tools; requires a Ph.D and demonstrated accomplishment.

SRI International offers a congenial work atmosphere, competitive salaries & benefits, including a royalty and equity sharing program, tuition reimbursement and company-matched 403(b). EOE. For more information, please visit us at: www.sri.com. Please send resumes to: Victoria Bautista, Employment & Diversity Specialist, SRI International, 333 Ravenswood Ave, EL356, Menlo Park, CA 94025. Email: victoria.bautista @sri.com Fax: 650-859-4222.

UCI Pharmacology Chair

The University of California, Irvine is seeking applicants and nominations for the Chair of the Department of Pharmacology. We are searching for an outstanding individual with an internationally recognized research program and the leadership and personal skills to direct a department with important research and teaching responsibilities. The College of Medicine will support the new chair in expanding the department's resources to promote its education and research goals. Nominations and applications with curriculum vitae should be sent to:

Eric J. Stanbridge, Ph.D.
Chair, Pharmacology Search Committee
Department of Microbiology
& Molecular Genetics
University of California, Irvine
B235 Med Sci
Irvine, CA 92697-4025
ejstanbr@uci.edu

The University of California is an Equal Opportunity Employer committed to excellence through diversity.



POSTDOCTORAL POSITION IN IMMUNOLOGY

Postdoctoral position in tissue specific autoimmunity available immediately in the Laboratory of Immunology, NEI, NIH. The project involves development and use of antigen-MHC-class II dimers on an Ig backbone (parallel technology to MHC tetramers) to identify, track and modulate the function of autoreactive T cells in an antigen-specific fashion.

Additional information on http://www.nei.nih.gov/intramural/imm-reg.htm. Applicants must have a strong background in immunology and molecular biology and less than 5 years postdoctoral experience. Stipend is \$30,000 - \$40,000 per year, commensurate with experience. Contact:

Dr. Rachel Caspi Lab. Immunol., NEI, NIH 10 Center Drive, 10/10N222 Bethesda, MD 20892-1857 Voice: (301) 435-4555 Fax: (301) 480-6668

NIH is an Equal Employment Opportunity

FACULTY POSITION Tenured or Tenure-Track, Rank Open Proteomics/Mass Spectrometry

The College of Medicine at the University of South Alabama seeks a dynamic INVESTIGATOR with an established research program in the area of proteomics/protein chemistry utilizing mass spectrometry as a major research tool. Rank and competitive salary will depend on experience and accomplishments. The successful candidate will be provided with spacious laboratory facilities in which to conduct an independent research program and will have responsibility for the proteomics/mass spectrometry core facility including technical support. A grant has recently been funded for purchase of state-of-the-art equipment. Faculty appointment will be in the newly established Cancer Institute and/or in one of the basic science departments. The College of Medicine is a rapidly developing institution with strong research emphasis in basic medical science, with more than 80% of the graduate faculty having substantial extramural funding. The greater Mobile area, with a population near 500,000 and a diverse cultural heritage, is located on the Gulf of Mexico. Mobile offers mild winters; excellent opportunities for golfing, fishing, and other outdoor sports; proximity to uncrowded sandy beaches; and inexpensive housing. To apply, send a statement of relevant accomplishments and future research plans, curriculum vitae, and names of three references to: Dr. June Ayling, Search Committee Chair, Pharmacology Department, 3370 MSB, College of Medicine, University of South Alabama, Mobile, AL 36688. E-mail: jayling@jaguar1.usouthal.edu.

VISITING ASSISTANT PROFESSOR CELL BIOLOGY

The Department of Biology, College of William and Mary, invites applicants for a nine-month faculty research leave replacement at the Assistant Professor level effective fall 2001. Applicants should have a Ph.D., teaching and independent research experience, and a strong commitment to undergraduate education. The successful applicant will teach a large, upper-division fall semester course in molecular cell biology. Spring semester teaching will be negotiated. Depending upon interests, research opportunities are possible. Applicants should submit curriculum vitae, contact information for two references, and a statement of teaching and research interests to: Diane Shakes, Cell Biology Search, Department of Biology, College of William and Mary, P.O. Box 8795, Williamsburg, VA 23187. Review will begin March 15, 2001, and continue until the position is filled. The College is an Equal Employment Opportunity/ Affirmative Action Employer.

POSTDOCTORAL POSITION The University of Texas Southwestern Medical Center

Position available to study kidney-specific gene regulation, kidney development, or polycystic kidney disease. Ph.D. and/or M.D. with strong background in molecular genetics or developmental biology required. Send curriculum vitae and names of three references to: Dr. Peter Igarashi, Chief, Division of Nephrology, University of Texas Southwestern, 5323 Harry Hines Boulevard, Dallas, TX 75390-8856. FAX: 214-648-2071; website: www.swmed.edu/home_pages/nephrology/; e-mail: Peter.Igarashi@utsouthwestern.edu. UT Southwestern is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION to study molecular motor directionality, motility mechanisms including motor stepping and processivity, and cellular function. Background in biochemistry or cell and molecular biology preferred. Send résumé and names of three references to: S. A. Endow, Ph.D., P.O. Box 3020, Duke University Medical Center, Durham, NC 27710. E-mail: endow@duke.edu. An Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN



POSTDOCTORAL/RESEARCH INSTRUCTOR position available in NIH-funded laboratory at Southern Illinois University School of Medicine to work with Mark Francis, M.D., Chief, Division of Rheumatology. Experience in signal transduction or molecular biology desired. Future advancement to faculty position is possible. Send curriculum vitae and the names of three references to: Ms. Jan Baxter, Medical Services Administrator, SIU School of Medicine, P.O. Box 19636, Springfield, IL 62794-9636. Closing date April 1, 2001, or until

SIU-SM is an Equal Opportunity/Affirmative Action Employer.

TENURE-TRACK FACULTY POSITION Vascular Biology The University of Texas Houston

The Vivian Smith Center for Neurological Research and the Department of Integrative Biology and Pharmacology, both in the School of Medicine, are seeking applicants for a tenure-track faculty position at the ASSISTANT or ASSOCIATE PROFESSOR level. Candidates should have a Ph.D. or equivalent degree, postdoctoral experience, and evidence of research accomplishments. Preference will be given to Scientists willing to work on important problems in vascular biology from a molecular, physiologic, or genetic perspective. A competitive salary and ample start-up funds will be provided for a period of no less than three years. The anticipated start date is September 1, 2001. Applicants should submit curriculum vitae and the names of three professional references (with telephone numbers) to: Dong H. Kim, Chair of Search Committee, 6410 Fannin Street, Suite 1020, Houston, TX 77030. The University of Texas is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITIONS

Positions are available immediately to study dopamine receptor signal transduction pathways in the kidney in models of obesity and hypertension. The candidate should have a strong background in biochemistry and cell biology. Opportunities are available to learn physiological techniques including measurements of renal function and influence of disease states and drugs on ischemia-reperfusion injury in the kidney. Please send a letter of interest, curriculum vitae, and arrange to have three letters of recommendation sent to:

Dr. Mustafa F. Lokhandwala Dean and Professor of Pharmacology College of Pharmacy University of Houston Houston, TX 77204-5511

The University of Houston is an Affirmative Action/Equal Opportunity Employer. Minorities, women, veterans, and persons with disabilities are encouraged to apply.

RESEARCH ASSOCIATE POSITION available immediately in the Department of Radiation Oncology at Case Western Reserve University. The candidate will work in the fields of cancer biology, radiation biology, and DNA repair with focusing on radiosensitization in mismatch-repair deficient human tumors. Applicants should have a Ph.D. with at least three years of postdoctoral experience in cancer research. Strong backgrounds in mammalian cellular and molecular biology are preferred. Please send curriculum vitae along with names of three references to: Dr. Timothy Kinsella, Department of Radiation Oncology, LTR 6068, University Hospitals of Cleveland/Ireland Cancer Center, 11100 Euclid Avenue, Cleveland, OH 44106-6068. E-mail: tjk4@po.cwru.edu. Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL ASSOCIATE NATURAL PRODUCTS CHEMIST Metagenics Research and Development

Postdoctoral position available immediately to develop techniques and software for the chemical fingerprinting of natural botanicals being developed for use in nutraceuticals. Must have the ability to purify and identify natural compounds in order to support a biological screening program. Candidate should be a team player as this position will be part of a fourperson research team. Candidate should have a recent Ph.D. in chemistry or biochemistry with emphasis on natural products. Experience with HPLC methods development and the use and/or development of chemometric software. Knowledge of extraction methodologies desirable. Publication is highly encouraged. Position is funded annually and is budgeted for two years with possibility of renewal. Gig Harbor is a wonderful community on Puget Sound just minutes from Seattle. Send curriculum vitae and names of three references to: Dr. Gary Darland, Metagenics Inc., Research and Development, Gig Harbor, WA 98335.

POSTDOCTORAL ASSOCIATE BIOINFORMATICS Metagenics Research and Development

POSTDOCTORAL POSITION available immediately for an individual with the demonstrated ability to derive patterns from both public and proprietary databases containing gene expression data. The results will be used in the development and evaluation of nutraceutical products, so an interest in both natural products and nutrition is highly desirable. Candidate should be a team player as this position will be part of a four-person research team. Candidate should have a recent Ph.D. in biochemistry, biology, microbiology, or molecular biology. Knowledge of in vitro assays (e.g., ORAC) is desirable. Publication is highly encouraged. Position is funded annually and is budgeted for two years with possibility of renewal. Gig Harbor is a wonderful community on Puget Sound just minutes from Seattle. Send curriculum vitae and names of three references to: Dr. Gary Darland, Metagenics Inc., Research and Development, Gig Harbor, WA 98335.

POSTDOCTORAL POSITION

The Henry M. Jackson Foundation for the Advancement of Military Medicine is seeking a Postdoctoral Fellow for the Department of Anatomy, Physiology, and Genetics at the Uniformed Services University of the Health Sciences in Bethesda, Maryland. The incumbent will study the function of melanopsin, a recently identified putative photopigment that may play a role in vision or the photoregulation of circadian rhythms (*J. Neurosci.* 20:600–605). Requirements: Ph.D. with a background in biology, biochemistry, neuroscience, or related area. Send cover letter and résumé to:

Human Resources Department Attention: Number 010009 Henry M. Jackson Foundation for the Advancement of Military Medicine 1401 Rockville Pike, Suite 600 Rockville, MD 20852 E-mail: jobs@hjf.org

Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL/RESEARCH ASSOCIATE (Rockville, Maryland). Chemist/Biologist with experience in mass spectrometry to study effects of formaldehyde on protein and nucleic acids. Will join multidisciplinary team of Pathologists, Molecular Biologists, and Chemists working to develop new approaches to molecular diagnosis of disease. FAX cover letter, three references, and curriculum vitae with sarry requirements to: Dr. Mason; Telephone: 301-319-0638; e-mail: MASON@AFIP.OSD.MIL.

Rapid Access to NCI Discovery Resources (RAND) Program

The National Cancer Institute is requesting applications for the following new initiative: Rapid Access to NCI Discovery Resources (RAND) program. The RAND program will make available to academic investigators, on a competitive basis, the discovery and early preclinical development contract resources of NCI's Developmental Therapeutics Program. The goal of RAND is to remove the most common barriers between basic research findings and their exploitation for discovery of new molecular entities. RAND does not fund grants; applications to the program are requests for NCI drug discovery and development resources to conduct specific tasks the applicants themselves are unable to carry out in their efforts to translate basic research findings to the discovery of new drugs and biologics. Examples of tasks that may be requested include: production/characterization of molecular target proteins; highthroughput screening (HTS) assay development; natural product isolation/ characterization; synthesis of combinatorial libraries; early pharmacology and in vivo efficacy studies. RAND Program tasks will be distinct from the Rapid Access to Intervention Development (RAID) initiative. RAND will focus on lead discovery and optimization, whereas, RAID will focus on later development after selection of a lead compound or construct.

The current deadline for receipt of applications is April 1, 2001; applications can be submitted April 1 and October 1 annually. A Letter of Interest (LOI) must be submitted via email to the Program Coordinator 30 days prior to the application deadline (March 1, 2001). Further information about this program, including detailed instructions for preparing proposals and LOIs can be found at http://dtp.nci.nih.gov/docs/rand.html. Telephone or email inquiries are encouraged and should be made to:

> - RAND Program Coordinator -Developmental Therapeutics Program National Cancer Institute Executive Plaza North Building, Suite 8000 6130 Executive Blvd. Rockville, MD 20852 Tel: 301-496-8720 Fax: 301-402-0831

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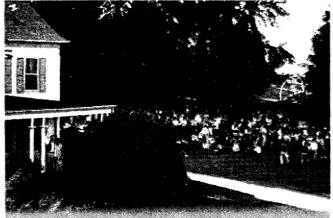
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Spring 2001 Meetings

- Vector Targeting Strategies for Therapeutic Gene Delivery
- Stem & Progenitor Cells: **Biology & Applications**
- Telomeres & Telomerase
- Learning & Memory
- Proteolysis & Biological Control
- Genome Sequencing & Biology
- Tyrosine Phosphorylation & Cell Signaling
- Retroviruses
- 66th Symposium: The Ribosome

Fall 2001 Meetings

- Yeast Cell Biology
- Eukaryotic mRNA Processing
- Mechanisms of Eukaryotic Transcription
- Eukaryotic DNA Replication
- Microbial Pathogenesis & Host Response
- Programmed Cell Death
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- Molecular Approaches to Vaccine Design
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Mayo Clinic POSTDOCTORAL FELLOW-SHIPS in allergic diseases. Postdoctoral positions available immediately to study allergic diseases at Mayo Clinic Rochester and Mayo Clinic Scottsdale. Aspects include discovery of novel eosinophil granule proteins, mechanisms and regulation of eosinophil activation, role of IgE in the allergic response, generation/characterization of murine transgenic and gene knockout models of allergic disease, eosinophilassociated cutaneous disease, inflammatory mechanisms or allergic diseases in humans, and function of respiratory smooth muscle. Applicants can work either at Mayo Clinic Rochester or Mayo Clinic Scottsdale. Grant agency requires that all candidates must be U.S. citizens of permanent residents. Please send curriculum vitae, bibliography, and names and addresses of three references to: Gerald J. Gleich, M.D., Department of Immunology, Mayo Clinic, 200 First Street S.W., Rochester, MN 55905. Telephone: 507-284-7166; FAX: 507-284-5045; e-mail: gleich@ mayo.edu; See also website: http://www. mayo.edu/research/. Mayo Clinic is an Affirmative Action and Equal Opportunity Employer and Educator.

POSTDOCTORAL RESEARCH ASSOCIATE in developmental sensory neurobiology. Position available for well-qualified Postdoctoral Fellow to carry out research on hypoxia and hyperoxia induced cellular plasticity in the carotid body and its sensory (petrosal) ganglion. Functional protein expression studied using molecular genetic methods, ELISA, and immunocytochemistry. Quantitative neuroanatomical methodologies also used. Ph.D. or equivalent required. Send curriculum vitae and three letters of reference to: Dr. Gerald Bisgard, Department of Comparative Biosciences, University of Wisconsin, 2015 Linden Drive West, Madison, WI 53706. E-mail: bisgardg@svm.vetmed.wisc.edu. Deadline: March 15, 2001. Affirmative Action/ Equal Opportunity Employer.

POSTDOCTORAL POSITION available for a recent graduate with a Ph.D. in microbiology or a related field to work on developing a novel system for studying the molecular basis of host-pathogen interactions. The goals of the project are to study the effects of genetically altered host cells on the outcome of microbial infections. The project will combine exertise from the laboratories of Richard Kessin and Howard Shuman with Dictyostelium discoideum and Legionella pneumophila, respectively. Please send résumés and letters of recommendation to: H. A. Shuman, Department of Microbiology, College of Physicians and Surgeons of Columbia University, 701 West 168th Street, New York, NY 10032. FAX: 212-305-1468. Columbia University takes Affirmative Action toward Equal Employment Opportunity.

POSTDOCTORAL RESEARCH POSITION: AIDS pathogenesis. A Postdoctoral position is available to study SIV replication in the pulmonary and lymphoid systems and its effects on local immune environments. Candidates should be recent/pending recipients of a Ph.D. or equivalent degree and have experience in histopathology, molecular biology, or both. Send curriculum vitae, brief description of research experience and interests, and a list of three references to: Dr. Todd A. Reinhart, Sc.D., 606 Parran Hall, University of Pittsburgh, Pittsburgh, PA 15261. The University of Pittsburgh is an Affirmative Action/Equal Opportuinity Employer. Applications from qualified women, minorities, and/or disabled persons are encouraged.

POSTDOCTORAL POSITION MICROBIAL ECOLOGY

Postdoctoral research position available immediately to study microbial community structure in natural environments using molecular techniques and other microbiological methods. Experience in molecular techniques, especially PCR, DGGE analysis, and DNA sequencing and training in microbiology desirable. Submit curriculum vitae and three references to: Dr. Charles Kulpa, Director, CEST, 152A Fitzpatrick Hall, University of Notre Dame, Notre Dame, IN 46556. E-mail: cest.1@nd.edu.

POSITIONS OPEN

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POSTDOCTORAL POSITIONS Department of Pharmacology The George Washington University

Postdoctoral Scientists are sought in the following areas:

Molecular Oncology: Steven Patierno, Ph.D. (1) Molecular carcinogenesis: mechanisms of metal-induced DNA damage, apoptosis, and carcinogenesis. Neuroscience: David Mendelowitz, Ph.D. (1)

Neuroscience: **David Mendelowitz**, **Ph.D.** (1) Neurobiology of neurons involved in cardiorespiratory function. Patch clamp electrophysiology, mechanism of cardiorespiratory rhythm generation, transsynaptic viral labeling of neuronal networks. **Margaret Sutherland**, **Ph.D.** (1) Glutamate transport's role(s) in neurodegeneration. Molecular, biochemical, and behavioral studies using novel transgenic models of glutamate transport overexpression and models of neurodegeneration. **Vincent Chiappinelli**, **Ph.D.** (1) Function of central nicotinic receptors. Presynaptic and postsynaptic roles examined through patch clamp recording in brain slices and impact of short-term and chronic exposure to nicotine.

Please submit curriculum vitae specifying the researcher to whom you are applying: Professor Vincent Chiappinelli, Chair, Department of Pharmacology, The George Washington University, 2300 Eye Street, N.W., Washington, DC 20037. E-mail: phmvac@gwumc.edu. The George Washington University is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL FELLOW HUMAN GENE THERAPY RESEARCH INSTITUTE

The Human Gene Therapy Research Institute (HGTRI) has available a Postdoctoral Fellow position for research in gene transfer systems and their application to the treatment and prevention of cancer.

Laboratory focus is on translational research with a long-term goal of improving gene transfer into humans. Backgrounds in virology, cancer biology, molecular biology, immunology, and microbiology will be considered. Position is available immediately.

HGTRI is a not-for-profit, academic research group primarily funded by the Central Iowa Health System of Des Moines. Laboratories provide state-of-the-art equipment, animal facility, and adminstrative and technical support. You can learn more about HGTRI by visiting the website: www.hgtri.org. Applicants should submit curriculum vitae, an outline of current and future research interests, and three references to: Charles J. Link Jr., M.D., Director, Human Gene Therapy Research Institute, Iowa Health System, 1313 High Street, Suite 111, Des Moines, IA 50309. Equal Opportunity Employer/Affirmative Action/Minorities/Females/Disability/Veteran.

POSTDOCTORAL POSITION Colorado State University

Available immediately to study molecular basis of fiber type transformation in skeletal muscle. Candidates should have a Ph.D. in biology or related field and experience in gene regulation and/or signal transduction pathways. Individuals with strong backgrounds in biochemical and recombinant DNA techniques are preferred. Send curriculum vitae along with names of three references to: Dr. Donald L. Mykles, Department of Biology, Colorado State University, Fort Collins, CO 80523. E-mail: don@lamar.colostate.edu.

POSITIONS OPEN

TWO POSTDOCTORAL POSITIONS IMMUNOLOGY

Two positions are available in the laboratory of **Dr. Deborah Fowell** in the Center for Vaccine Biology and Immunology, University of Rochester. Position One: signals for T helper cell differentiation. To identify the T cell signaling pathways required for commitment to discreet cytokine gene programs (Th1/Th2) in the context of infectious disease. Skills in gene regulation and/or signal transduction an advantage. Position Two: Regulatory T cells and autoimmunity. To identify the molecular and cellular requirements for the control of autoimmunity by CTLA-4 + regulatory T cells. Skills in animal models of disease an advantage.

Both positions require prior expertise in cellular and/or molecular immunology. Please send curriculum vitae and the names of three references to: Dr. D. J. Fowell, David Smith Center for Vaccine Biology and Immunology, University of Rochester Medical Center, 601 Elmwood Avenue, Rochester, NY 14642. E-mail: deborah fowell@urmc.rochester. edu. University of Rochester is an Equal Opportunity/Affirmative Action Employer.

THE UNIVERSITY OF MICHIGAN MEDICAL SCHOOL Department of Pathology

POSTDOCTORAL POSITIONS available immediately to study signal transduction pathways of apoptosis, innate immunity, and inflammation in mammalian systems. Experimental approaches will include biochemical analysis, molecular biology, and gene targeting in mice. NIH training requires U.S. citizenship or permanent resident status. Send curriculum vitae and names/addresses of three references to: Dr. Gabriel Nunez, Department of Pathology, The University of Michigan Medical School, 1500 East Medical Center Drive, 4219 CCGC, Ann Arbor, MI 48109. E-mail: bcix@umich.edu.

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

POSTDOCTORAL POSITIONS MOLECULAR VIROLOGY The Wistar Institute

Postdoctoral positions in molecular virology are immediately available for outstanding individuals with interests in the establishment, maintenance, and reactivation of Epstein-Barr Virus (EBV) latency. Highly motivated individuals with a background in molecular biology, gene regulation, signal transduction, cancer biology, and virology are encouraged to apply. Interested candidates should send curriculum vitae and list of three references to: Human Resources, Paul Lieberman, Ph.D., Associate Professor, The Wistar Institute, 3601 Spruce Street, Philadelphia, PA 19104. E-mail: lieberman@wistar.upenn.edu. Equal Opportunity Employer/Affirmative Action/Minorities/Females/Disabled/Vererans.

A position is available for POSTDOCTORAL RESEARCH in a laboratory dedicated to the study of normal and malignant hematopoietic proliferation and differentiation. Current projects include the study of hematopoietic growth factor signal transduction and the molecular characterization of a novel family of nuclear migration genes utilizing gene disruption, transgenic mice, and protein biochemistry. A strong background in molecular biology is suggested. Interested applicants should submit their curriculum vitae and the names of three references to: Kristin Gaul (BAM), Henry Hood Research Program, Weis Center for Research, Geisinger Clinic, 100 North Academy Avenue, Danville, PA 17822-2600.

POSTDOCTORAL POSITIONS MICROVASCULAR PHYSIOLOGY

Two NIH-funded Postdoctoral positions are available immediately to study various aspects of microcirculatory function in the Department of Physiology at West Virginia University. Candidates should be highly motivated and have a background in cardiovascular physiology or vascular biology. The specific areas of focus are (1) the contribution of oxygen radicals to altered endothelial function associated with high salt intake and hypertension, (2) interactions between oxygen and nitric oxide in microvascular control, and (3) changes in microvascular function that accompany rapid network growth during juvenile maturation. Highly competitive salaries with full benefits are available. More information about the laboratory can be obtained by visiting our website: http://www.hsc. wvu.edu/som/physio/boegehold.htm. Review of applications will begin immediately and continue until positions are filled. Interested individuals should send curriculum vitae and contact information for three professional references to: Matthew A. Boegehold, Ph.D., Department of Physiology, P.O. Box 9229, West Virginia University Health Sciences Center, Morgantown, WV 26506-9229. Telephone: 304-293-5240; FAX: 304-293-3850; e-mail: mboegehold@hsc.wvu.edu. West Virginia University is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

POSTDOCTORAL POSITIONS Studies of Proteolytic Mechanisms in Neurotransmission and Neurodegenerative Diseases

Postdoctoral positions are available to investigate proteolytic mechanisms required for (1) the biosynthesis of peptide neurotransmitters and (2) Huntington's and related neurodegenerative diseases. Studies will define the proteases and protease inhibitors involved in (1) producing active neuropeptide transmit-ters (enkephalin, ß-endorphin, ACTH, and others); and (2) pathogenesis of the mutant huntingtin protein in Huntington's disease. Interdisciplinary approaches in molecular biology and genomics, protease/peptide biochemistry and proteomics, and cell biology/gene expression are utilized; a Ph.D. degree with experience in at least one or two of these disciplines is required. State-of-the-art proteomic and genomic facilities are available at the new Buck Institute (website: www.buckinstitute.org) located near San Francisco. Projects involve research collaborations with University of California San Francisco and University of California San Diego. Please send curriculum vitae with names of three references to: Dr. Vivian Hook, c/o Human Resources, Buck Institute for Age Research, 8001 Redwood Boulevard, Novato, CA 94945. E-mail: hr@buckinstitute. org; FAX: 415-899-1810.

POSTDOCTORAL POSITION (NIH funded) available to study T cell fate decisions (differentiation, memory, survival) during in vitro and in vivo immune responses, including transplantation models. Projects include characterization of alloreactive TCR transgenic mice, biochemical analysis of anergic T cells, and retroviral gene delivery into T cells to modulate immune responses. Candidates should hold a Ph.D. (or equivalent) in immunology. Please send curriculum vitae (including names of three references) to: Dr. Laurence A. Turka, University of Pennsylvania, 700 CRB, 415 Curie Boulevard, Philadelphia, PA 19104-6144. FAX: 215-573-2880; email: turka@mail.med.upenn.edu. Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available immediately to study long-term changes in network properties in hippocampal slices after ischemia using a novel 8x8 microelectrode-array recording system. Experience in tissue culture, electrophysiology, and/or analysis of complex systems is desirable. Send curriculum vitae and names of three references to: Dr. Amy Arai, Department of Pharmacology, Southern Illinois University School of Medicine, P. O. Box 19629, Springfield, IL 62794-9629. E-mail: aarai@siumed.edu. Affirmative Action/Equal Opportunitv Employer.

ANNOUNCEMENTS

EMBO WORKSHOP ON SIGNAL TRANSDUCTION-MEDIATED REGULATION

OF NUCLEAR TRANSPORT Postponed from January to August 2001

The workshop will be held during August 11 to August 14, 2001, at Strasbourg, France. Participants should fill out the application at the website: http:// neurochem.u-strasbg.fr/embows.html. Some places are still available.

COURSES AND TRAINING

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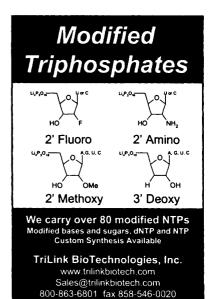
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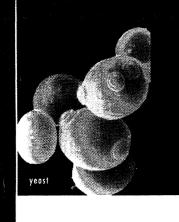
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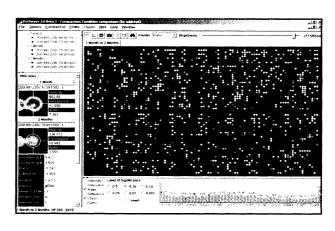
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- 1. Lennon, G., Auffray, C., Polymeropoulos, M., Soares M.B. (1996) Genomics 33,
 - 2. http://www.ncbi.nlm.nih.gov/UniGene/index.html
 - 3. http://ratEST.uiowa.edu

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