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# Growth by Peter Gwynne

The Dutch life science industry has entered a period of growth, stimulated in part by a 100 million guilder government program to subsidize start-ups of biotechnology companies. The growth has sparked a strong demand for qualified life scientists, from inside and outside the country.







The Netherlands Cancer Institute The Netherlands National Research Council Solvay Pharmaceuticals B.V. Organon, Akzo Nobel Group Vrije Universiteit The Netherlands did not participate in the surge of growth in the life science industry that started in the mid-1990s in larger European Union countries such as the United Kingdom and Germany. Certainly, Dutch life science businesses have grown at a steady pace over the past five years. The country now has about 300 life science companies, about 50 of which have been founded in the past half-decade. But a report by consulting firm Moret, Ernst & Young, published in 1998, concluded that it should do more. While the country has a high level of scientific knowledge, the report points out, it lags behind other nations in the emergence of start-up companies — the vehicles that are essential for the commercialization of scientific knowledge and the development of a successful national cluster of life sciences.

The Dutch government wants to remedy that situation. Its Ministry of Economic Affairs has recently instituted an action plan to stimulate commercial life science. The Ministry plans to provide 220 million guilders (USD100 million) over the next four years to subsidize the formation of small life science firms, particularly in biotechnology. It aims to encourage about 15 start-ups per year. A related program will devote 100 million guilders (USD45 million) to permit academic researchers interested in starting up biotechnology companies to retain their university positions for two years while they organize their business plans.

These efforts face two systemic problems. The current crop of Dutch high school students has shown relatively little interest in sci-

ence. And a wide gulf exists between academia and industry. Despite their nation's long history as a trading nation, qualified Dutch scientists have scant enthusiasm for entrepreneurial ventures. Of 80 postdoctoral fellows in life science who attended a recent retreat organized by The Netherlands Cancer Institute, only six wanted to start up a biotechnology company. Most of the remainder wished eventually to have a permanent position in research or teaching, without any management responsibilities.

That dynamic means that Dutch life scientists who want to work for industry have a wide choice of jobs. So severe has the shortage of

qualified individuals become that life science companies have had to devise enterprising schemes to attract them. Recruiters who visit universities routinely hand out trinkets that prominently display their companies' logos. Some firms have set up consulting contracts with life science professors, who channel their students to the firms. A few companies have taken the process further, by using hairdressers as recruiters; even science students must have their hair cut occasionally. However, life science companies haven't yet reached an extreme experienced by an information technology company, which interviewed candidates for a computer job in an automobile showroom; individuals who accepted a job received a car on the spot.

Recruiters and academics agree that Dutch universities produce extremely capable life scientists. The system offers Ph.D. candidates a comfort level rarely experienced elsewhere. Students sign four-year contracts as employees of the universities that they attend, with salaries and pension rights. They don't have to raise their own research funds, although they have some teaching obligations.

The experience plainly works well. Perhaps as many as 25 percent of Dutch Ph.D.s go abroad for postdoctoral fellowships, often to such prestigious institutions as Harvard University, the Massachusetts Institute of Technology, and the University of California, San Francisco. Those who later choose to return to jobs in the Netherlands find that their international experience is a valuable asset. Biotechnology companies in particular value the teamwork and management skills that postdocs routinely pick up overseas.

A few universities have set up multidisciplinary programs that will help to equip students for careers in industry. Delft University, for example, has just started a new program in life science and technology, with 35 students enrolled. The University of Amsterdam has a new program in medical biology, with 120 students. Those programs have not met with universal approval. Some critics argue that students in multidisciplinary courses lose the completeness and thoroughness of studies in single disciplines.

At the same time, Dutch universities, companies, and other organizations are increasingly recruiting life scientists from abroad. Corporations

#### Anton Berns The Netherlands Cancer Institute



The Dutch government ... recently instituted an action plan to stimulate commercial life science.

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72

especially recruit abroad for specialists in topics that Dutch universities don't usually teach, such as clinical testing and bioinformatics. Those scientists have little trouble assimilating into the local culture. Most Dutch individuals they are likely to meet in universities, companies, and on the street speak excellent English and other foreign languages. In fact, one barrier to learning Dutch is the locals' insistence on addressing Englishspeaking foreigners in English. Managers from abroad must get used to the fact that Dutch companies are run more democratically than those elsewhere. However, that has proved a minor barrier to overcome. Indeed, the country has a culture that welcomes scientists from overseas.

• • **AMSTERDAM:** Anton Berns, director of research for The Netherlands Cancer Institute (NKI, for Nederlands Kanker Instituut), laments what he sees as a waste of talent instilled in postdoctoral scientists who train at NKI and similar institutions. "Most of our postdocs obtain permanent jobs in research, but a few end up in other areas, as the perspectives in research are not very good in comparison with other jobs," he says. "There is a shortage of excellent candidates for the academic higher ranks, such as professors, and an excess of candidates for lower tenured ranks."

Since entrepreneurialism is largely unknown to Dutch scientists, few of the second-rank scientists choose to move into industry. Instead, says Berns, "they roam around for a while, doing second and third postdocs and finally disappear somewhere, very often in areas outside life science."

The irony is that many of those scientists have skills that would



make them effective members of research groups in biotechnology companies. What they lack is the necessary stimulus to move into business. "There's not much activity in the area to persuade people to go into the biotechnology

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The Netherlands Cancer Institute/Antoni van Leeuwenhoek Hospital (NKI/AvL) is an integrated cancer institute, combining a research laboratory and hospital under one roof in a single, independent organization. The laboratory covers all major areas of basic molecular biology and clinical research, with special emphasis on mouse tumor models, mouse (reverse) genetics, cancer cell biology and translational research requiring close collaboration between clinical and basic scientists. The NKI/AvL research program is subdivided among thirteen divisions: Cell Biology, Molecular Carcinogenesis, Cellular Biochemistry, Immunology, Molecular Biology, Tumor Biology, Molecular Genetics, Experimental Therapy, Medical Oncology, Surgical Oncology, Diagnostic Oncology, Radiotherapy and Psychosocial Research and Epidemiology.

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We have tenure track Assistant Professor positions available in Molecular Genetics, Cell Biology and Development Biology. These AvL fellows are given the opportunity to start their own group building on their own proven excellence as a post-doc and the facilities offered by the institute, including financial support in the initial phase to appoint personnel.

### ...for talented graduate-students and post-docs. Visit us at www.nki.nl

We have positions open for graduate-students and post-docs in most research divisions. Those interested are invited to visit the home page of the NKI/AvL research divisions where a detailed description of the ongoing research of each division can be found, as well as a description of the available positions (www.nki.nl).

**Inspiring international atmosphere** Approximately 450 people work in the research laboratory. Research discussions, lectures and seminars in English and a large number of non-Dutch post-docs, students and staff members contribute to the stimulating and international atmosphere of the Institute. The research divisions within the NKI/AvL are supported by state of the art equipment, usually with dedicated support staff. The institute has a large animal facility with a special unit for the generation of transgenic mice, an animal histology and pathology department, a digital microscopy (including CLSM) and electron microscopy facility, a flow cytometry (FACS), a sequencing and a microarray facility. Furthermore, the research activities are supported by a central computer and network facility, a central cryogenic storage facility, a glassware kitchen, a (electro-) technical workshop, a large (cancer) library, and an audiovisual department.

**Inviting conditions** We offer a stimulating and interactive research environment, state of the art facilities, a competitive salary (including possibilities for additional tax-reduction) and housing facilities in the vicinity of the Institute. Graduate-students take part in the Oncology Graduate School Amsterdam. Researchers at the NKI/AvL have no teaching obligations.

**For further information and addresses** Visit our home page (http://www.nki.nl) or contact the Director of Research, Prof. Anton Berns, Plesmanlaan 121, 1066 CX Amsterdam, The Netherlands.



THE NETHERLANDS CANCER INSTITUTE / ANTONI VAN LEEUWENHOEK HOSPITAL

#### Eduard Klasen 🕴 The Netherlands National Research Council

industry, although a couple of universities have small science parks around them," continues Berns.

NKI itself, an independent organization that combines the 180-bed Antoni van Leeuwenhoek Hospital and a research laboratory under one roof, offers training relevant to clinical and scientific research. Facilities for clinical research include a strong patient data base and clinical data management and active research groups in epidemiology and psychosocial oncology.

The Institute has high standards for entry. "We want students and postdocs who are smart, dedicated to science, and hardworking," says Berns. "The Institute is organized like a U.S. institute. Students should have some practical experience so that they can do a decent piece of



work for their thesis, which will take about four years. In that time, they will have to take a number of courses. It is quite normal that Ph.D. students publish two or three first-rate papers as part of their thesis work."

NKI welcomes students from outside The Netherlands. "All seminars and working discussions are held in English," says Berns. "Our annual report is in English. So

are theses. And Amsterdam is a very international and tolerant metropolis. I would encourage ambitious students to apply to do their Ph.D.s in many of the excellent Dutch groups that specialize in the life sciences."

• • AMSTERDAM: "The government plans to stimulate more activity in the life sciences, especially start-ups," says Eduard Klasen, acting director of The Netherlands National Research Council, an independent organization known as NWO for its Dutch name Nederlandse Organisatie voor Wetenschappelijk Onderzoek. "We'll have a program to bridge the gap between academia and new industry. We want to find promising postdocs who want to start their own firms. If we can reach what we and the government want, we'll come up with 15 start-ups per year, which would really mean something."

Klasen also has the permanent role of director of the Medical Research Council, a part of NWO. That organization, he says, "is running a small program in drug research. One of the themes is to bridge the gap between industrial and university researchers."

Bringing academically trained life scientists into industrial research presents a huge challenge. "When students start their careers in university, they never think about going to industry for research," Klasen explains. "They think only about university research. The problem is that we now have too many postdocs for university posts. But since they have only worked in research in the university setting, they are less attractive to industry. We really have to work hard to succeed in our postdocs start-up program."

Even attempting to interest high school students in scientific research has proved a difficult task for NWO and other Dutch scientific organizations. "Young people are not going into research as much as we would like them to do," Klasen admits. "In the United States, scientific research is something



that is admired. Here in Holland that is not the case. We are salesmen here. It's a cultural problem more than anything else."

One approach encouraged by NWO is recruiting scientists from abroad. Dutch scientists returning to their homeland benefit from their international experience "if they have been abroad in a country that companies trust and have had good results scien-

tifically speaking," says Klasen. Life science firms also welcome foreign scientists. "I don't have the impression that there are many barriers to their fitting in, although our laws are a bit complicated from time to time," he adds.

What qualities do life scientists require to succeed in The Netherlands? "You need more than just academic experience," Klasen advises. "Management skills, which are not taught to life scientists, are very important. So is international experience, even for a couple of months. In other words, you need skills outside science."

 AMSTERDAM: As a company recruiter for Solvay Pharmaceuticals B.V., Roy Lucardie experiences at first hand the reluctance of Dutch life scientists to enter industry. "It's very difficult to get life scientists interested in your company," he confides. So Solvay Pharmaceuticals, which specializes in medications relevant to psychiatry, gastroenterology, women's health, and cardiology, has set up several enterprising recruit-



В.<

Pharmaceuticals

Solvay

83%

Lucardie

Roy

ment schemes in the past two years.

"We have our own internship agency," says Lucardie. "In our division, which has 1,200 employees, we have 100 internships per year for college students at all levels. We try to get to know the interns for the nine to 12 months they work. Our staff also includes professors from universities. We call and ask them to send students.

In addition, we have our own temp agency in-house."

The company guarantees first-class treatment for all job seekers. "Every applicant who writes us a letter is guaranteed feedback in 24 hours," says Lucardie. "We never write them off. In the past two years, I've built a three-meter bookcase to hold applicants' files. When we need someone we call them, day or night. They feel very flattered."

The process worked well enough last year to enable the company to hire 200 employees. Most individuals hired to do R&D at Solvay Pharmaceuticals have polytechnic training, which emphasizes practical rather than theoretical science. "More than 70 percent of our R&D positions are filled by polytechnic graduates. We mainly need them because there is a lot of testing and development to do," explains Lucardie. "For basic research, we need Ph.Ds. They bring new technologies and new knowledge to the company." Solvay Pharmaceuticals generally avoids hiring life scientists with Masters' degrees. Those it takes on "are expected to get a Ph.D.," Lucardie continues.

He has one major complaint about students he interviews. "I'm not fully



### The Royal Danish School of Pharmacy

# PhD Studentships 2000

The Graduate School of Drug Research is pleased to announce that 4 PhD studentships will be awarded in 2000 to encourage young science graduates to embark on a research career in drug research. The purpose of the Graduate School of Drug Research is to train the next generation of drug researchers. Emphasis is given to integrated research training with the aim of performing innovative drug research in an interdisciplinary and highly integrated environment and the PhD study program includes obligatory PhD courses focusing on key elements in drug research. Furthermore, the industrial perspective is essential and research has to be carried out in an industrial environment for at least three months. Applications are invited for three-year studentships beginning August 1<sup>st</sup>, 2000 from candidates that hold or expect to hold a master's degree in a field relevant to one of the following projects:

Physiology-based pharmacokinetic-pharmacodynamic modelling in drug development: Interaction between lipids and drugs. Supervisors: Dr. Morten Colding-Jørgensen, Novo Nordisk A/ S and Dr. Søren N. Rasmussen and Dr. Peter Thygesen, Royal Danish School of Pharmacy.

Synthesis and molecular pharmacology of ionotropic glutamate receptor ligands with focus on kainate-preferring receptors. Supervisors: Dr. Thomas Varming, NeuroSearch A/S and Dr. Ulf Madsen, Dr. Tine B. Stensbøl and professor P. Krogsgaard-Larsen, Royal Danish School of Pharmacy.

**Metabotropic glutamate receptors: molecular and in vitro pharmacological studies.** Supervisors: Dr. Christian Thomsen, H. Lundbeck A/S and Dr. Hans Bräuner-Osborne, Royal Danish School of Pharmacy.

Liquid preparations for inhalation. Formulation design and clinical evaluation of solutions intended for nebulisation. Supervisors: Professor Vagn Handlos and Dr. Lars Heslet, H:S Apoteket and Professor Henning G. Kristensen, Royal Danish School of Pharmacy.

The PhD studentship is to be completed in accordance with the Ministerial Order on the PhD Degree of the Danish Ministry of Education and the Regulations and Guidelines for the Awarding of the PhD Degree by the Royal Danish School of Pharmacy. The terms of employment are stated in the agreement between AC (the Danish Confederation of Professional Associations) and the Danish Ministry of Finance.

Applications (in 5 copies and including CV and diploma) **marked ref. No. 00-345-3** should be submitted to Jette Buur, PhD, School Manager, Graduate School of Drug Research, Department of Medicinal Chemistry,

#### The Royal Danish School of Pharmacy Universitetsparken 2 DK-2100 Copenhagen

and be in our hands by May 3, 2000.

Further information on the Graduate School of Drug Research, the individual PhD projects and procedure for application can be found on our WWW site (<u>http://www.dfh.dk/activities/gradschool</u>) or by contact to Jette Buur, PhD, tel. +45 35 30 62 02, fax +45 35 30 60 40 or e-mail jbb@dfh.dk.

The Royal Danish School of Pharmacy is an institution of higher education under the Danish Ministry of Research. The School of Pharmacy's objective is to educate pharmacists and researchers and to conduct drug related research. The School of Pharmacy, which has no faculties, comprises five departments, a library, and an administration. The School of Pharmacy's staff totals approximately 350. There are about 1,200 undergraduates and some 120 PhD students.



satisfied about their social skills," he says. "My feeling is that they love science so much that they have grown up in a unidimensional way. Working in industry has a lot to do with cooperating. So we put them through a lot of social courses on working together, communicating, and managing."

Solvay readily recruits outside The Netherlands, mainly in the United Kingdom and Germany. "We are compelled to look outside Holland at several levels, such as clinical research directors for global clinical testing," Lucardie explains. "We have no education of this type in Holland. We expect candidates to have communication skills, experience in teamwork, and openness to other ideas."

What advice does he have for recruits? "Send in your CV or write a letter in English," he says. "But also make contacts. There's always someone who knows about a position to be filled."

• • OSS: Organon, the largest pharmaceutical company based in The Netherlands and the largest pharmaceutical unit in the Akzo Nobel group, has doubled in size in the past five years. That growth has forced the firm, which has core expertise in hormone research and gynecology and also carries out research on therapies for psychiatry, atherothrombosis, and rheumatoid arthritis, to go far afield in search of both projects and scientists.

"As a medium-sized company, we realize that we can't do everything ourselves," explains Bjorn Oddens, head of medical and scientific publications for Organon. "We spend 30 percent of our research budget on outside collaborations. We're always looking beyond the company for strategic alliances and collaboration projects. Since we are based in The Netherlands, we obviously look here first; we're doing a lot of work with Dutch universities. But other companies we collaborate with are mostly in the United States or the United Kingdom. That tells you something."

Organon also recruits scientists from overseas. "We can find good people here in The Netherlands," says Oddens. "But for specialist topics such as bioinformatics we need an influx from abroad." Those individuals must fit certain requirements. "A Ph.D. is the first criterion," says Oddens. "We also value international orientation very highly. We expect that the scientists have been trained very well in their own discipline and that they also have a

multidisciplinary attitude. It is also very important that they have good communication skills. Most of our research is done in Oss and in Scotland and working with American genomics companies. If our scientists cannot communicate with their colleagues and those groups, we and they have a big problem."

Organon's recent growth has made its culture less parochial. "Five years ago, we had perhaps more of a Dutch culture," says



Oddens. "Now, it's more international. People fit in very easily; they like living in The Netherlands. So give it a try. If you have good qualifications and an international orientation and you like to work in teams on scientific challenges, you'll be perfectly fitted for working here. Be prepared to be blunt. Come voluntarily and make your complaints immediately if you don't like it."

• • AMSTERDAM: "A lot is going on in life sciences in The Netherlands at the moment in terms of programs at universities and companies," says Henk van der Steen, head of the personnel department in the faculty of sciences at Vrije Universiteit. "We have a bit of a gap between supply and demand, but there are all kinds of initiatives to make young scientists interested in life science."

Vrije Universiteit itself is contributing to such efforts with a medical and biomolecular sciences initiative called Biocomplexity. This multidisciplinary program combines individuals from the university's science and medical departments. The university is also encouraging academic-industry links by undertaking joint research programs with Dutch life science companies. "All departments have a lot of cooperative projects," says van der Steen. "And about 25 percent of the chemistry department's budget comes from collaborative projects."

The limited number of Dutch students interested in studying science has forced the university to seek students elsewhere if it is to satisfy the life science industry's demand for scientists. "We have a lot of students from Eastern Europe and a number of Asians, including some Chinese scientists," says van der Steen. "We are trying to get international scientists at the Ph.D. level, as well as postdoctoral students."

When recruiting students, van der Steen looks for "people with international minds who don't mind living here for a couple of years and people who, besides being potentially good researchers, want to teach also. Wanting to live in Holland is, of course, also important." As attractions for recruits, van der Steen points out that the university has good research teams headed by well-known scientists. He also talks up the benefits of Vrije's location in Amsterdam, which has an internationally oriented culture.

His advice for life science students interested in studying in The Netherlands: "Keep track of the university pages on the Internet, including Vrije's at www.vu.nl. All the international departments have an English language section in their home pages. If you find something that's appealing, send an e-mail."

Stimulated by government funds and programs, The Netherlands is slowly emerging as a new center for life science business, notably biotechnology. Universities have started to contribute to that emergence by collaborating with private-sector firms on research projects and setting up multidisciplinary courses. Industry's demand for qualified scientists will continue to remain strong, and both businesses and universities will provide opportunities to scientists from overseas.

For further valuable career features, go to www.scienceonline.org, click on Science Careers, then click on Advice and Perspectives.

Bjorn

Oddens

13535

Organon



## **Bioinformatics Scientists** at Aventis Pharma

Aventis Pharma was formed after the merger of the pharmaceutical divisions of Rhône-Poulenc and Hoechst and ranks as one of the world's leading life science companies.

The company is dedicated to the treatment and prevention of human diseases. We achieve this through the research, development, manufacture, and sale of innovative prescription drug products.

Aventis Pharma Deutschland GmbH, based in Frankfurt, is the leading pharmaceutical company in Germany. With around 7000 employees and an annual sales revenue of approx. DM 4 billion we are able to support medical institutions, doctors, pharmacists and patients with a large range of innovative products and customer services.

With one of the world's largest research and development budgets, an outstanding workforce, an experienced international management team and a strong market presence we will continue with our quest to be one of the market leaders in the area of life sciences.

#### **Aventis Bioinformatics**

For Aventis, Bioinformatics is a critical component of the drug discovery process. Bioinformatics experts in our Discovery Support groups are working closely with scientists in Disease Groups, Biotechnology, and other parts of the organization to identify and validate novel targets. We are expanding our existing team at our main research site in Frankfurt am Main and are seeking

#### **Bioinformatics Scientists**

By applying your bioinformatics expertise, you will contribute to local target identification and validation projects by developing innovative solutions that enhance our data processing and interpretation capabilities. Further responsibilities include training and consulting, as well as testing and evaluating new applications and analysis approaches in the context of real, disease-oriented projects.

Successful candidates will have a PhD in biology, statistics, computer science or a related field, basic knowledge of molecular biology, genetics and/or drug development, and significant experience with common bioinformatics software and biological databases. Shell- and Perlscripting experience on UNIX systems is required, as well as basic knowledge of relational databases and SQL. Experience in advanced Perl/CGI programming. XML, CORBA, or design and implementation of relational databases and database integration would be advantageous. The international nature of our business makes excellent communication skills in English a must.



Additionally, experience in one of the following areas is highly desirable:

- Analysis of gene expression or proteomics data, including statistical analysis.
- Modeling of pathways and/or prediction of protein interactions.

We offer a creative scientific and international environment, which will allow you to further develop your skills very quickly.

Our state-of-the-art facilities provide you with every opportunity to be successful in this challenging position and prepare you for your future career. In addition we offer a competitive salary and an attractive bonus package which will suit your qualification.

To apply, please send a full curriculum vitae including names of references to:

Aventis Pharma Deutschland GmbH Application Service Building K 607 65926 Frankfurt Germany

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### The Queen's University of Belfast



## Chair of Peptide Biochemistry (Ref. 00/Q046A)

#### School of Medicine

Applications are invited for this post tenable from 1 July 2000.

Queen's University is the centre for medical education and research in Northern Ireland. A major investment and restructuring programme to enhance the School's research capacity and performance is now underway and chairs in immunology, microbiology, oncology and surgery have recently been accepted by outstanding applicants.

The University now wishes to appoint a Professor of Peptide Biochemistry who will help to lead medical research in the new millennium.

The Medical School is focusing its clinical research into five research centres: cancer; cardiovascular and genetics research; endocrinology; infection, inflammation and repair; and ophthalmology & vision science. The University is keen to see the endocrinology research centre continue to flourish in collaboration with other research groups in the Medical School, the Hospitals, the University and industry. The University is seeking a professor who, will prosecute his/her own research to the highest international levels and will co-ordinate, stimulate and encourage research in relevant areas. A research interest which is compatible with the School's research strategy would be an advantage.

Applicants must hold an honours degree and PhD or equivalent in biochemistry or related discipline, and have proven excellence in research in the field of peptide biochemistry as evidenced by publications, and successful research grant applications. They must also have experience in university teaching and in supervising research students. Experience in University and/or NHS management is desirable.

Informal enquiries may be directed to Dr Jim Curry, Department of Medicine at Belfast (028 90) 263226.

Salary is within the Professorial range, with eligibility for USS and there is an attractive package to assist with relocation and resettlement expenses if appropriate.

Closing date: 5.00 pm, Friday 5 May 2000.

Applicants, quoting reference number, may obtain further particulars from the Personnel Office,

The Queen's University of Belfast, BT7 1NN. Telephone (028 90) 273044 or (028 90) 273854 (answering machine). FAX: (028 90) 324944 or e-mail on personnel@qub.ac.uk

The University is committed to equal opportunities and to selection on merit. It therefore welcomes applications from all sections of society. Applications from women are particularly welcome as our monitoring information reveals fewer woman than would be expected are employed within this job category.

Please note that the University will be closed from Friday 21 April until Monday 1 May 2000 inclusive.

#### INVESTING IN EXCELLENCE



UNIVERSITY OF BRISTOL

Department of Anatomy in association with the MRC Centre in Synaptic Plasticity

#### **Professor in Neuroscience**

A world leader is sought for a Chair which has been created through the formation of a new MRC Centre at the University of Bristol. The focus of the Centre is the understanding of synaptic plasticity, particularly as it relates to learning & memory and neurodegeneration. It is based with the School of Medical Sciences which contains one of the largest neuroscience communities within Europe. The Centre employs a multidisciplinary approach, from chemistry and molecular biology, through cellular and systems analyses, to behaviour. It is expected that the successful applicant would complement existing activities whilst contributing to the overall mission of the Centre A generous space allocation in the heart of the Centre is available for the successful applicant. **Please quote reference 6310**.

### Lectureship/Senior Lectureship in Neuroscience

Created through the formation of a new MRC Centre. It is expected that the successful applicant would complement existing

activities whilst contributing to the overall mission of the Centre. Salary up to £35,670 per annum. **Please quote reference 6312.** 

Informal enquiries may be made to the Director of the MRC Centre, Professor G.L. Collingridge, E-Mail: G.L.Collingridge@Bristol.ac.uk or Tel: +44 (0) 117 928 7420. Details about the MRC Cetre for Synaptic Plasticity and the University of Bristol can be found on our Web site: http://www.bris.ac.uk/Depts/Synaptic/

For further details telephone (0117) 954 6947, minicom (0117) 928 8894 or E-Mail Recruitment@bris.ac.uk (stating postal address ONLY) quoting the appropriate reference number. The closing date for applications is 12th May 2000.

www.bristol.ac.uk

AN EQUAL OPPORTUNITIES EMPLOYER



### **Royal College of Surgeons in Ireland**

### **Professor of Molecular** Medicine

#### **Department of Clinical Pharmacology**

Applications are invited for the above full-time, permanent position. The post is funded initially by a grant from the Higher Education Authority to develop the Institute of Biopharmaceutical Sciences. The grant supports the establishment of a Clinical Research Centre (completion April 2000), contiguous laboratories and core biotechnologies (proteomics, genetics, mass spectrometry, organic synthesis, bioinformatics).

The Institute is a collaborative research programme involving several investigators with interests in different aspects of pharmacology/therapeutics, including cystic fibrosis, cardiovascular disease, neuropharmacology and pharmacogenetics.

The Professor of Molecular Medicine is a key post with an emphasis on therapeutics using modern biotechnology, such as the development of strategies towards gene therapy. The candidate would be expected to collaborate with the other investigators while developing his/her own research programme. While the candidate may be working in one of the areas mentioned above, this is not a requirement. Applications from both clinical and non-clinical scientists will be considered.

#### **Application Procedure**

Interested candidates who would like to discuss the position in further detail, are encouraged to contact Professor Desmond Fitzgerald at tel: + 353 - 1 -4782165 or email: dfitzgerald@rcsi.ie. Full details with a Curriculum Vitae (10 copies) should be forwarded to:

Human Resources Department, Royal College of Surgeons in Ireland, 123 St. Stephen's Green, Dublin 2, Ireland. Tel: +353 -1 - 402 2339 Email: humanres@rcsi.ie

Further information on the College is available on our website: www.rcsi.ie

Closing Date is Friday, 12th May 2000.

RCSI is an equal opportunities employer



The Swiss Federal Institute of Technology in Zurich (ETHZ) invites applications for the position of an

#### Assistant Professor of Pharmaceutical Chemistry

at the newly formed Department of Applied Biosciences. Research will focus on all aspects of structure-based drug design: synthetic, organic and medicinal chemistry; biophysical studies of protein-ligand interactions; computational chemistry. Support is provided by outstanding facilities at the Department of Applied Biosciences and the computational facilities of ETHZ. Involvement in teaching is expected at undergraduate and graduate levels.

Candidates should provide evidence of excellent achievements in structural biochemistry and structure-based design. Moreover, the ability to co-operate with colleagues in a multidisciplinary environment and pleasure in teaching are essential.

Assistant Professorships have been established to promote the careers of young scientists. The initial appointment is for three years, with the possibility of renewal for three additional years.

Applications including curriculum vitae, list of publications, and research plan should be submitted to the President of ETH Zurich, Prof. Dr. O. Kübler, ETH Zentrum, CH-8092 Zurich no later than May 15, 2000. The ETHZ specifically encourages female candidates to apply with a view towards increasing the proportion of female professors.

### FACULTY of MEDICINE

**CHAIR OF CANCER** RESEARCH

Applications are invited for appointment to a newly established Chair of Cancer Research within the University of Edinburgh, funded by the Imperial Cancer Research Fund. The University seeks to appoint a scientist who has made significant contributions to his/her field within cancer research, and whose interests will complement and take advantage of existing strengths in clinical and basic cancer research in Edinburgh. The post will also carry responsibilities as Director of Laboratory Research within the Imperial Cancer Research Fund Medical Oncology Unit sited in a new Cancer Research Building on the Western General Hospital campus. This new post will be exceptionally well resourced to facilitate the development of a major new programme in cancer research, which is already identified as a priority area for the Faculty of Medicine. Please quote REF: 306169SI.

Further particulars including details of the Application Procedure should be obtained from THE PERSONNEL DEPARTMENT, THE UNIVERSITY OF EDINBURGH, 9-16 CHAMBERS STREET, EDINBURGH EH1 1HT. Tel: 0131 650 2511 (24 hour answering service). http://www.personnel.ed.ac.uk/recruit.htm Closing date: 31 May 2000.



in Teaching and Research

Committed to Equality of Opportunity



The National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) is recruiting a Scientific Director for its Division of Intramural Research. The Scientific Director will direct a program of multidisciplinary laboratory and clinical research for the NIDDK, NIH. The incumbent is expected to serve as the principal advisor to the Institute Director on biomedical and scientific affairs involving the intramural research program. S/He will develop and recommend policies for the execution of the intramural research programs, determine their ongoing effectiveness, and recommend or develop new or revised research programs dealing with fundamental and clinical research related to diabetes and digestive and kidney diseases. In collaboration with senior officials, the Scientific Director will participate in the design and implementation of overall Institute management policies including program planning, budget formulation, and resource allocation. The Intramural Division has a staff of approximately 960 employees including Research Fellows, and a current annual budget in excess of \$114 million. In addition to the manageria/la/ministrative responsibilities outlined above, the Scientific Director will carry out his/her own research program. Resources commensurate with the proposed program will be provided.

Applicants must have a M.D. and/or Ph. D. degree, and have demonstrated scientific leadership and research experience in both a basic and clinical research program of national and international standing in an area relevant to diabetes, digestive and kidney diseases. Total salary is very competitive and will be commensurate with the experience of the candidate. A 25% recruitment and/or relocation bonus may also be available.

Please submit current Curriculum Vitae and Bibliography to: James Battey, M.D., Director: National Institute on Deafness and Other Communication Disorders and Search Committee Chair c/o NIDDK Office of Human Resource Management, NIDDK Attention: Ms. Joanna Voight Building 31/9A30 31 Center Dr MSC 2560 Bethesda MD 20892-2560



Applications must be postmarked by 5/15/00 and received by close of business 5/20/00 NIH IS AN EQUAL OPPORTUNITY EMPLOYER

#### Announcement

#### FRENCH "ACADEMIE NATIONALE DE MEDECINE"

#### PROFESSORSHIP

In order to foster international cooperation between academic and industrial research groups, the French Académie de Médecine and the Pierre Fabre Laboratories will open a one year professorship for the period of Autumn 2000 to Autumn 2001. The position is to be held in Toulouse-France at an academic institution or at a private research center or both.

This opening is reserved for a research professional at a high level and may be held in confirmation with sabbatical leave.

The position includes generous benefits depending upon the candidate's experience.

There are no citizenship restrictions.

Candidate selection will be made by a jury including members of the French "Académie de Médecine" and research professionals from Pierre Fabre Laboratories.

The proposals should include a detailed resume concerning the candidate and his/her family who would accompany him/her, description of the research project and all information useful for the selection.

The proposals should be sent to the following address before 30 May 2000

Pierre Fabre Laboratories REF/FARAH Le Carla 81106 CASTRES - FRANCE

#### **EUROPEAN OPPORTUNITIES**



#### KAROLINSKA INSTITUTET PROFESSOR IN STEM CELL RESEARCH

Karolinska Institutet invites applications for a position as professor in stem cell research, made possible through a donation from Tobias Stiftelsen. Outstanding individuals working on basic and/or clinical aspects of the biology of stem cells in different organ or tissue systems are encouraged to apply. We are especially interested in individuals who have made recent advances of great conceptual importance in stem cell research. Karolinska Institutet particularly encourages applications from women. The applicant should have experience in supervising postgraduate and doctoral students and have documented pedagogic skills as well as administrative competence. Further information about the position may be obtained from professor Urban Lendahl, Department of Cell and Molecular Biology, phone +46-8-7287323, fax +46-8-34 8135, e-mail: Urban.Lendahl@cmb.ki.se.

Please follow the Qualifications Portfolio for academic appointments at Karolinska Institutet available on the Web page, see below. **Deadline** for applications (letter of interest and publication list) is **May 15, 2000** 

Curriculum vitae, details of the applicant's scientific career, a list of publications and reprints of 20 selected publications and an outline of plans for future research should then be sent in 4 copies before June 12, 2000 to: Registrator, Karolinska Institutet, SE-171 77 Stockholm, Sweden. For the entire advertisement and the Qualifications Portfolio look at http://info.ki.se/news/index\_en.html E-mail: Registrator@ki.se

#### CHAIR, NATIONAL SYNCHROTRON LIGHT SOURCE

Brookhaven National Laboratory (BNL) is presently seeking a distinguished scientist to serve as Chair of the National Synchrotron Light Source (NSLS) Department.

As one of the largest synchrotron light sources in the world, the NSLS draws an international community of more than 2400 scientists annually from over 400 institutions to perform experiments. They carry out a wide range of innovative research in biology, chemistry, materials science, physics and various technologies. The NSLS is also a focus facility for the Laboratory's own research.

Among the responsibilities of the NSLS Chairperson, are to continue to build participation and commitment from the broad outside research community, to provide innovative leadership in scientific program development and synchrotron radiation source upgrades, and to integrate these upgrade programs with other national synchrotron sources. The NSLS is also involved in the development of UV and X-ray Free Electron Lasers.

The successful candidate should have a Doctorate in physics, chemistry, materials science, or biology, with extensive scientific accomplishments coupled with proven managerial capabilities and should be a recognized authority in his or her field. BNL is looking for an able leader who can build bridges to universities and industry.

BNL is a multidisciplinary laboratory carrying out basic and applied research in the physical and life sciences. It is situated on 5,000 acres in Eastern Long Island, a region where numerous high tech industries have made their home. The Laboratory has close ties to a number of leading North Eastern research universities. BNL is managed by Brookhaven Science Associates under contract with the U.S. Department of Energy.

The position is available by Oct. 1, 2000. The search will continue until the appropriate candidate is found. Applications and nominations should be sent to Dr. Peter Paul, Deputy Director for Science and Technology, Brookhaven National Laboratory, Building 460, P.O. Box 5000, Upton, NY 11973-5000. Fax: 516-344-7170. Visit our website at: www.bnl.gov. BNL is an equal opportunity employer committed to workforce diversity.

BRIDKHÆVEN

NATIONAL LABORATORY

www.bnl.gov

#### Faculty Positions University of Massachusetts Cancer Center

The University of Massachusetts Cancer Center at the University of Massachusetts Medical School is expanding initiatives in several key areas of cancer research. Applicants should have interests and accomplishments in: cell cycle and growth control; tumor suppressor genes; and apoptosis.

Successful candidates will be expected to establish independent research programs in a collaborative environment that interfaces multi-disciplinary, basic, clinical and translational research. Cancer center faculty participate in graduate and undergraduate medical and postgraduate teaching programs, as well as mentor pre- and post-graduate students and fellows. The positions are exceptional opportunities and will include generous start-up funds and laboratory space in a new state-of-the-art research building. Appointments will be on the tenure track and commensurate with the qualifications of the candidates. The University of Massachusetts is an Equal Opportunity/Affirmative Action Employer.

Applicants should send a curriculum vitae, a succinct statement of research, accomplishments and future research plans, along with the names of three individuals who can be contacted for recommendations to:

> Dr. Gary S. Stein Deputy Director for Basic Research University of Massachusetts Cancer Center 55 Lake Avenue North Worcester, Massachusetts 01655

### POSTDOCTORAL POSITION

Seeking a Postdoctoral Fellow interested in application of molecular biologic techniques to further the understanding of injury and repair processes in asthma. Requires a Ph.D., preferably in molecular biology, pathology or pharmacology. Experience in molecular biologic techniques also required. No clinical experience/exposure necessary. Funding for the position is available for 4-5 years.

> Submit CV to: Sally Wenzel, M.D. National Jewish Medical and Research Center 1400 Jackson Street, B121 Denver, CO 80206 Fax (303) 398-1775 E-mail: mccolluml@njc.org

NATIONAL JEWISH Medical and Research Center



AA/EOE

for approaches in developmental therapy. Applicants should have a recent Ph.D. degree in Pharmacology, Molecular Biology, Biochemistry, or a related discipline, or hold Pharm.D. or M.D. degrees. Submit curriculum vitae with names of three references to: Dr. Janet Houghton, Division of Experimental Hematology, Department of Hematology-Oncology, St. Jude Children's Research Hospital, 332 North Lauderdale, Memphis, TN 38105.

www.stjude.org

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# ife Mad e Better

he members of the Bristol-Myers Squibb Pharmaceutical Research Institute share one goal --- to discover and develop best-in-class. cost-effective medicines that enhance and extend human life.

#### Lead Discovery Wallingford, CT

Assay Design and Screening, B.S./M.S.: 2-4 years experience is required. Development and optimiza-tion of cell-based assays for high-throughput screens using various assay technologies and Acteens using various assay technologies and detection formats. A solid background in biochem-istry, cell biology and molecular biology is essential. Hands-on experience with automation and computer applications in an industrial environment will be seen as a significant advantage. Job Code: PRMA175MA1

Nuclear Hormone Receptors, Ph.D.: A minimum of 3 years relevant experience in a pharmaceutical or biotech environment is desired. Experience in nuclear hormone receptors using both molecular and biochemical approaches. Developing highthroughput cell-based and in vitro assays using various assay technologies and detection formats. Job Code: PRMA175MA2

Molecular Biologist, B.S./M.S.: 2-5 years of relevant experience is desired. Responsibilities include design and validation of whole/live cell reporter assays. Molecular biology experience including basic techniques in DNA cloning, protein expression, bacterial culture, reporter assays and the establishment/maintenance of stably transfected mammalian cell lines. Previous experience in signaling and tran-scription desired. Job Code: PRMA175KL

Enzymologist/Biochemists, Ph.D.: Several years of drug discovery experience in a pharmaceutical or biotech environment is highly desired. Responsibilities include developing high-throughput Responsibilities include developing high-throughput assays for automated systems using various tech-nologies, including fluorescent-based (such as prompt, FRET, FP, time-resolved, etc.) and radiomet-ric assay formats. Experience in enzyme kinetics, protein characterization and regulation and assay design is essential. Job Code: PRMA175MB

We use resume-scanning technology. Please submit on plain white bond paper using standard type and fonts (no italics, graphics or staples please).

Biochemist/HTS Specialist for Compound Profiling. B.S/M.S.: 2-5 years of relevant experience in an industrial environment. Responsibilities include developing profiling screens for PRI Scientists using cutting-edge HTS technologies. ideally, the candi-date will be familiar with automated systems and miniaturized assay plate formats. Strong data analy-sis skills with both biochemical and pharmacological information required. Able to work to a strict information required. Able to work to a strict timetable. Capable of working in a complex matrix environment. Job Code: PRMA175KD

Assay Design and Screening, Ph.D.: 2-5 years of rel-evant experience in an industrial environment. Design and development of high-throughput screens using various assay technologies and detection for-mats. A solid background in biochemistry/enzymology is essential; expertise in the biology of kinases, biosphatases or proteases is preferred. One posi-tion additionally requires a solid background in bac-terial and fungal microbiology. Job Code: PRMA175RP1

Assay Design and Screening, B.S./M.S.: 2-5 years of relevant experience in an industrial environment. Work within assay design teams for the implementation of high-throughput screens. A background in biochemistry/enzymology is required. Familiarity with instrumentation, robotics and computers is desirable. Job Code: PRMA175RP2

Pharmacologist/Enzymologist, Ph.D.: Several years of experience in an industrial environment is highly desired. Responsibilities will include developing and implementing high-throughput assays for both fully automated and workstation systems. Broad knowledge of biochemistry of human disease an advantage. Experience in protein characterization, recep-tor/ligand interaction characterization, signal trans-duction, enzyme kinetics and assay design (homogeneous formats) is essential. Comfort with various technologies, such as fluorescent-based (as in prompt, FRET, FP, etc.), radiometric, etc.; and data analysis infrastructure a big plus. Job Code: PRMA175SM

# For positions in Princeton, NJ, send resume to: Bristol-Myers Squibb Company Pharmaceutical Research Institute P.O. Box 4000 Princeton, NJ 08543-4000 Fax: (609) 581-4481

#### Virology Wallingford, CT

Biochemist/Molecular Virologist, Ph.D.: 6-8 years experience desired. Responsibilities include leading research team in defining unique viral targets for anti-HIV intervention, and collaborate with other research groups in the design and development of novel antiviral agents. Postdoctoral experience in molecular biology. molecular biology, enzymology or receptor biology, additional experience working with HIV-1 is a plus. Job Code: PRMA175PL2

Associate Research Biochemist/Molecular Biologist, B.S./M.S.: 2-4 years experience desired. Research laboratory experience required. Responsibilities include developing and performing anti-HIV intervention assays and collaborating with other research groups in the development of novel anti-HIV agents. Experience in biochemistry, molecu-lar biology or virology is highly desired. Job Code: PRMA175PL1

#### Immunology Princeton, NJ

Molecular Biologist/Protein Biochemist, B.S./M.S.: 3 years experience in molecular biology or related field to carry tissue culture cell lines for use in bio-chemical studies or cell-based assays. Experience with tissue culture and sterile techniques, cell lines and purification of leukocytes from human blood samples. Technical expertise in protein biochemistry, including ELISA, immunoprecipitation, Western immunoblotting, cell fractionation, affinity chro-matography and enzyme assays required. Experience with molecular biology, including cDNA library construction and expression of fusion gene products in bacterial or baculovirus expression sys-tems is desired. Job Code: PRSM175SK

For positions in Wallingford, CT, send resume to: Bristol-Myers Squibb Company Pharmaceutical Research Institute P.O. Box 5101, 5 Research Parkway Wallingford, CT 06492-7661 Fax: (203) 677-7762



**Pharmaceutical Research Institute** 

Bristol-Myers Squibb is proud to be an equal opportunity employer, M/F/D/V.

# **Discover Merck.**

#### Employment opportunities in Rahway, NJ

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.

#### **Associate Scientists**

We are currently seeking motivated, talented Associate Scientists to join multidisciplinary teams striving to develop breakthrough therapies in the areas of immune and inflammatory disorders. The focus is on leukocyte trafficking and chemokine biochemistry with the goal of developing small molecules that modulate these processes.

Responsibilities include the development and performance of assays for the identification and characterization of such modulators. Additional responsibilities include the cloning, expression and in vivo evaluation of components of chemokine systems directed towards gaining a greater understanding of leukocyte biology.

The successful candidates should be hard working individuals with a B.S./M.S. degree or equivalent and 2-3 years' experience in biochemistry, immunology or molecular biology. Exceptional laboratory skills in basic molecular biology and receptor binding studies are desired. Experience in general immunology and in the isolation and manipulation of primary cells is advantageous. Good oral and written communication skills are required.

We offer a comprehensive salary and benefits package as well as the opportunity to work with the best in the industry. Please forward your resume and letters of reference, indicating salary requirements, to: Merck Positions, PAF Code: XHXMRSMLK04070, P.O. Box 92164, Los Angeles, CA 90009-2164. E-mail: merck@isearch.com. Fax: (310) 337-3393. Please refer to the PAF Code in your correspondence. Qualified candidates will be contacted. We are an Equal Opportunity Employer, M/F/D/V.



Visit our website at www.merck.com



### MAKE WAVES DEAN of the GRADUATE SCHOOL of OCEANOGRAPHY

The University of Rhode Island is seeking a dynamic leader for the Graduate School of Oceanography. Located on its own campus, bordering the West Passage of Narragansett Bay, GSO is one of the nation's premier marine research and education institutions. The successful candidate will be an accomplished scientist and educator with a record of significant research, graduate advising, strong managerial and communication skills, a commitment to working with a diverse range of people and groups, and experience with national and international scientific agencies. Must have demonstrated commitment to enhancing diversity and equal opportunity for minorities and women. The Dean is responsible for developing, articulating, and implementing a vision that reflects the significant role of GSO and marine programs within URI. Rhode Island, and throughout the nation. Operational duties will require leading 35 faculty, 30 marine scientists, and approximately 200 staff; and stewardship of the 160-acre Narragansett Bay Campus and R/V Endeavor.

If you believe you fit this description, please submit a resume and cover letter by mail (do not send via email) to: Thomas Rockett, Search Committee Chair, (Log 091275SM), UNIVERSITY OF RHODE ISLAND, PO Box G, Kingston, RI 02881. Review of applications will begin on April 14, 2000, and continue until the position is filled. The University of Rhode Island is an AA/EE0 employer and is strongly committed to achieving excellence through increased diversity of its faculty, staff, and students. Persons from under-represented groups are encouraged to apply.

For more details about the Graduate School of Oceanography, an on-the-job description, and required and preferred qualifications, please see the announcement on our web pages: www.uri.edu and www.gso.uri.edu.



the University of Health Sciences

#### ANATOMIST MOLECULAR GENETICIST/BIOLOGIST PHARMACOLOGIST

The University of Health Sciences College of Osteopathic Medicine invites applications for three **ASSISTANT OR ASSOCIATE PROFESSOR** faculty positions which are available immediately.

#### ANATOMY

Under the direction of the Chair of Anatomy, this individual will teach human gross anatomy (lecture and laboratory dissection) and histology in the Department of Anatomy. Qualified candidates will have a Ph.D. in Anatomy or related discipline with experience in teaching anatomy and histology.

#### MOLECULAR GENETICIST/BIOLOGIST

Under the direction of the Chair of Biochemistry, this individual will teach molecular genetics/biology. Qualified candidates will have a doctorate degree and postdoctoral research and teaching experience.

#### PHARMACOLOGIST

Under the direction of the Chair of Pharmacology, this individual will teach medical pharmacology. Qualified candidates will have a Ph.D. in Pharmacology or a Pharm.D. degree and postdoctoral teaching and research experience.

The candidates filling these positions must have a strong interest and commitment to teaching medical students. Research and/or other scholarly activities are expected in addition to teaching and University service. We are looking for positive team players with exemplary professional and personal characteristics.

Salary and rank will be commensurate with experience and qualifications. We offer an outstanding benefits package including dollar for dollar match on the retirement plan. Applications will be reviewed until successful candidates are identified. Please send a letter of interest, curriculum vitae, a statement of teaching philosophy, a statement of research interests, and the names, addresses, and telephone numbers of three references to:

Susan M. Schmidt Assistant Director of Human Resources the University of Health Sciences 1750 Independence Ave. Kansas City, MO 64106-1453 EOE Kiva Genetics, Inc. is engaged in the discovery and development of products based upon the genetics of common diseases and therapeutic response. We have collaborations with both the pharmaceutical industry and academia, and have established a series of internal discovery programs aimed at understanding the contribution of genetics to a variety of prevalent disease. Our success has created an excellent opportunity for a select group of qualified professionals to join our growing team and contribute toward future discoveries.

# The Future of Medicine is

# GENETICS

#### Bio-informatics Associate (analyst/developer)

Design, build, test, maintain and support the software and databases required to run our genotyping and related processes. Aid in the design of web-based user interfaces for internal and external consultants. A solid technical and functional understanding of software engineering is required. A sound level of skill in the following: database design, SQL, C, C++, PERL, application architecture etc., and significant experience w/ building software and/or databases for, or suitable for, commercial use.

### Epidemiologist

Candidates with a Ph.D. in Genetics who can identify potential collaborations, both academic and industrial as well as managing & maintaining interactions between Kiva and outside collaborators and partners should apply. Help to build the infrastructure required to generate and analyze large amounts of genetic data. Candidates are required to provide technical expertise in epidemiology and its applications in medical and pharmaceuticals fields. Applicants should have 5 years postdoctoral experience, and maintain a strong network within the academic and biotech communities.

#### Program Director Genetics (2)

Identify potential collaborations to utilize and apply Kiva's high-throughput SNP genotyping platform. Develop internal programs in genetics utilizing Kiva's technology. Provide technical expertise in genetics and its applications in medical and pharmaceutical fields. Integrate biology and genetics to create comprehensive programs in disease areas. Ph.D. in Genetics or related field, 5 years postdoctoral experience.

### **Director of Genotyping**

Build and maintain a 3-shift operations organization, as well as provide technical development, oversight, and support for the genotyping facility. A Ph.D. in a biological science is a must, along with 3 years postdoctoral experience managing a high throughput biotech group in a clinical, biotech, or research lab setting. Excellent computer skills with experience in informatics as employed in a high throughput environment.

### **Director of Automation**

Lead the scale-up of automation within the Production Group and work closely with teams on next generation equipment. Hire and develop a team of skilled engineers and technicians to support and maintain the production equipment. A Master's Degree in a relevant field of science and a minimum of 5 years experience in state-ofthe-art automation management, development and implementation. Working knowledge of the basic processes of Production Genotyping is required along with 5 or more years of experience with laboratory automation and robotics systems. Strong vendor relationships are helpful.

#### Quality Systems Manager

Develop and continuously improve an electronically based Quality System for the company. This manager would perform regular internal and external audits, as well as manage the Safety Program, all focused on continued compliance with regulations. A Scientific or Engineering Bachelors degree or equivalent work experience is required, along with 5 years QA/QC experience in the Biotech or Pharmaceutical industry.

#### Manager, DNA Extraction Team

Responsibilities include building an effective organization focused in DNA extraction from patient samples, monitoring advances in technology and working with internal groups for discovery of new technology. Candidates for this position should possess an MS degree or equivalent in a biological science as well as 3 years experience leading/managing a high-throughput biotechnology group focused on DNA extraction. Experience in informatic approaches employed in high throughput environments is required.

Kiva is also seeking Research Associates, Research Scientists and a Legal Counsel with experience in patent law. For these and other exciting positions please visit our web site at:

#### www.kivagen.com

Kiva Genetics is an equal opportunity employer where your contributions won't go unnoticed, and we're prepared to offer you a competitive compensation package, including a stock incentive plan, generous benefits, and a fun, fastpaced work environment. To apply, send resumes to:

Human Resource Department Kiva Genetics Inc. 2375 Garcia Avenue Mountain View, CA 94043 Fax: 650-934-9375 email: jobs@kivagen.com please reference the job title you are applying for





#### MANAGER, BIOLOGY

Your drive to succeed, leadership skills, and background in animal health vaccines make you an ideal candidate to perform and manage research to develop new and highly effective differentiated viral vaccines for animals. As you lead the Virology Group and multidisciplinary teams, you'll draw on your in-depth knowledge in numerous areas—molecular virology, immunology, biochemistry, resource allocation, and human direction and development—to achieve department goals. You'll also work closely with key partners across Pfizer Central Research to promote cross learning and timely advancement of projects. You'll need a PhD in Molecular Virology or Biochemistry and more than 5 years relevant experience in research and in a supervisory position. Animal health vaccine research experience is desired. challenge innovation teamwork

careers that matter

Pfizer Central Research is the R&D division of Pfizer Inc, a global, research-based pharmaceutical company at the forefront of a dynamic, rapidly growing industry. We're known for both our unparalleled drug development pipeline and the respect and resources we give to our people. If that appeals to you, maybe yours could be the new Face of Pfizer. Join us in the following opportunity at our Central Research facility in Groton, Connecticut.

Recently ranked among Fortune's "100 Best Companies to Work For," Pfizer offers an exceptional work environment complete with training opportunities designed to develop your supervisory effectiveness and professional talents. We encourage all candidates to apply online through our website at **www.pfizer.com**. If necessary, you may also mail your resume to: Pfizer Inc, Central Research, Ad Code 00004615CI, c/o Aon Consulting, P.O. Box 25, Findlay, OH 45839. Pfizer is an equal opportunity employer.



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#### DIRECTOR, LIVER STEM CELL CENTER

Cutting-edge liver progenitor cell company in Research Triangle Park, NC seeks Ph.D. or M.D. Responsibilities include supervising scale-up of cell purification process and coordination of the activities of the organ procurement agency, surgeons and scientists. Our goal is to establish a facility for processing and distribution of liver progenitor cells for clinical trials nationally and internationally. Competitive salary and comprehensive benefits package including stock option plan. EOE.

Please send curriculum vitae to:

Human Resources Incara Pharmaceuticals Corporation P.O. Box 14287 Research Triangle Park, NC 27709 By fax: (919) 544-1245.

Visit our website at www.incara.com.

### ACUSPHERE INC.

Acusphere Inc. is a rapidly growing and well-funded biotechnology company engaged in the research, development and commercialization of drug delivery systems. We are currently seeking the following scientific professionals to join our team:

#### SCIENTIST: DRUG DELIVERY SYSTEMS

We are seeking a Scientist interested in the development of controlled release delivery systems. As a member of the Formulations and Process Research group, you will be responsible for planning and leading formulation and process optimization studies with several different microencapsulation technologies. A strong background in the use of biomedical polymers, microencapsulation techniques, and polymer characterization methods is preferred. Excellent communication and organization skills and the ability to work well on a team are required. You should have a Ph.D. in Chemical Engineering, Biomedical Engineering, or Polymer Sciences and 1-3 years of industrial experience. Job Code: DC

#### SENIOR SCIENTIST: PHARMACEUTICS

We are seeking a Senior Scientist to lead a team in pharmaceutics and formulations support. You will be responsible for the development, optimization and characterization of final dosage forms. A background in the formulation of pharmaceutical dosage forms and experience in physical pharmacy and analytical chemistry is preferred. Excellent communication and organizational skills and the ability to work well on a team are required. You should have a Ph.D. in Chemistry or Pharmaceutics and 2-5 years of experience in the pharmaceutical or biotechnology industries. Job Code: JS

Acusphere Inc. offers a stimulating work environment as well as a competitive salary and an excellent benefits package, including equity participation. Please send your resume to: Acusphere Inc., Attn: HR, 38 Sidney Street, Cambridge, MA 02139.

Acusphere is an Equal Opportunity Employer M/F/D/V.

#### ASSISTANT PROFESSOR PLANT BIOINFORMATICS

The Department of Plant Agriculture at the University of Guelph invites applications for a full-time, tenure-track research and teaching position at the rank of Assistant Professor.

The successful candidate is expected to initiate a creative research program on computational and statistical methods to interpret and exploit molecular genetic and physiological data that will enhance our understanding of fundamental plant processes and lead to the genetic improvement of crops. Interactions with other scientists involved with genomics, breeding, quantitative genetics, crop modeling and statistics will be expected. The individual is expected to teach at the undergraduate and graduate level in his/her area of expertise, to seek research funding from federal, provincial and industry sources and to work as part of a team of scientists in the university's Food System Biotechnology Centre. The position is 60% research and 40% teaching.

Candidates should have a Ph.D. degree in an appropriate discipline and postdoctoral experience is preferred. Candidates should provide evidence of a commitment to teaching and of excellence in research. Excellent research facilities and support are available. Please see our web page (http:// www.oac.uoguelph.ca/CRSC/mainpath.html) for details on the Department, the facilities and the University.

Applications, including curriculum vitae, University transcripts, a statement of research and teaching interests and the names of three referees should be sent to: Dr. Clarence Swanton, Chair, Search Committee, Department of Plant Agriculture, Crop Science Building, University of Guelph, Guelph, Ontario, Canada, N1G 2W1. Fax: (519) 763-8933. Closing date May 31, 2000. This appointment is subject to final budgetary approval. Salary will be commensurate with qualifications and experience.

In accordance with Canadian Immigration requirements, this advertisement is directed to Canadian citizens and permanent residents of Canada. The University of Guelph is committed to an employment equity program that includes special measures to achieve diversity among its faculty and staff. We therefore particularly encourage applications from qualified aboriginal Canadians, persons with disabilities, members of visible minorities and women.



The Pharmaceutics Department at Amgen is recruiting researchers at the B.S./M.S./Ph.D. levels with a degree in Chemistry, Biochemistry, Biophysics, or Pharmaceutical Sciences to support formulation development projects for liquid, lyophilized, and alternative dosage forms. Applicants must have a fundamental knowledge of protein biochemistry and experience in analytical method development, data analysis, experiment design, independent research, and oral-written communication skills.

#### **RESEARCH SCIENTIST**

The successful candidate will have an extensive background in biomolecular separations and biochemical characterization. Experience with HPLC method development is required. Additional experience in formulation development of proteins/antibodies is desired. (Ph.D. level)

#### EXPERIENCED RESEARCH ASSOCIATE

Job responsibilities include biophysical characterization of protein structural transitions, analysis of protein-protein interactions, and applied research to improve the physical and chemical stability of proteins. Three or more years of hands-on laboratory experience with HPLC and various types of spectroscopy are required. Additional experience in analytical ultracentrifugation and DSC is preferred. (B.S./M.S. level)

#### **EXPERIENCED RESEARCH ASSOCIATE**

The successful candidate will be responsible for developing and applying sensitive bioanalytical methods to monitor drug formulations and identify and characterize modifications in a variety of formulation conditions. Must be proficient at protein sequencing, mass spectrometry, peptide mapping, and innovative methods for characterizing protein-peptide modifications. (B.S./M.S. level)

#### ENTRY-LEVEL RESEARCH ASSOCIATE

The selected individual will conduct formulation studies, and analyze and interpret data to optimize shelf-life stability in developing suitable liquid or lyophilized formulations. Proficiency with HPLC, UV-Vis spectroscopy, CE, and gel electrophoresis is highly desired. (B.S. level)

We offer a highly competitive compensation and benefits package that includes a retirement and savings plan, an on-site fitness center, and three weeks of vacation. For immediate consideration, please send resume to: **Pharmaceutics Recruiting, Attn: Ad Code 552, Mail Stop 8-1-A, One Amgen Center Drive, Thousand Oaks, CA 91320-1799 or e-mail in ASCII text to: Pharmaceutics@amgen.com, Attn: Ad Code 552.** EEO/AA Employer M/F/D/V.

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Requirements include a Ph.D. degree or equivalent and at least two years of post-doctoral training. Successful applicants will be expected to establish excellence in an independent research program, to compete effectively for external funding and to play an active role in the delivery of the educational objectives of the Program. Effective July 1, 2000, the appointments will normally be made at the Assistant Professor level although outstanding applicants at a higher level will be considered. Salary will be commensurate with qualifications and experience. Depending on the sponsoring Department, the position will be tenure track or a five year renewable contract.

Applicants should forward a curriculum vitae outlining current and long-term research objectives especially as they pertain to Proteomics and Bioinformatics and arrange for three letters of reference to be sent before June 1, 2000 to:

> Dr. Peter N. Lewis Director, Program in Proteomics and Bioinformatics MSB 5221, University of Toronto Toronto, Ontario Canada M5S 1A8 website: http://P-B.med.utoronto.ca Proteomics.Bioinformatics@UToronto.ca

In accordance with its Employment Equity Policy, the University of Toronto encourages applications from qualified women and men, members of visible minorities, aboriginal peoples and persons with disabilities.



R&D Systems, Inc., a leading manufacturer of biological products, is looking for proven scientific professionals. We offer a competitive salary and a comprehensive benefits package.

#### Manager Protein Purification Development

Duties include leading a group of approximately 10 Scientists and Research Associates in the Protein Purification Development group in the development of cost-effective, robust and scaleable processes for the purification of a large variety of recombinant proteins. Requires PhD in Biochemistry or related field with a minimum of 7+ years of relevant experience in the biotechnology or pharmaceutical industry, hands-on experience in recombinant protein purification including laboratory and process scale chromatography, ultrafiltration, centrifugation, etc. Knowledge of protein chemistry and protein characterization methods. Excellent laboratory, communication, problem solving and people skills are required. (Job Code M/90)

#### Group Leader Cell Culture

Duties include leading an existing mammalian cell culture group responsible for developing medium to large scale cell culture processes for recombinant protein production. Requires PhD in Cell Biology or related field with 2-5 years experience in mammalian cell culture techniques, bioreactor systems, recombinant protein expression and media optimization. Excellent communication skills, lab management experience and knowledge of cGMP regulatory requirements are also desired. (Job Code M/75)

#### Scientist

Duties include recombinant protein purification and refolding from bacterial, mammalian and insect cells. Requires PhD or BS/MS with 8+ years in protein chemistry or related field. Relevant experience in the biotechnology or pharmaceutical industry and familiarity with process scale chromatography are preferred. Excellent laboratory, communication, problem solving and people skills as well as knowledge of cGMP are required. (Job Code SCI/90)

#### Scientist

Duties include studying the biology and developing bioassays for cytokines involved in developmental biology and neurobiology. Requires a PhD in biology or biochemistry with 0-2 years research experience in cell biology, developmental biology or related field. Excellent laboratory, communication, problem solving and people skills required. (Job Code SCI/76)

Candidates wishing to be considered for these positions please submit your curriculum vitae or resume to:

R&D Systems, Inc. Human Resources 614 McKinley Place NE Minneapolis, MN 55413

hr@rndsystems.com No Agencies Please Equal Opportunity Employer



For Every Child. For Every Reason.



#### Director

#### **Division of Pediatric Hematology-Oncology**

The Children's Hospital and The Department of Pediatrics, The Ohio State University College of Medicine and Public Health, seek an accomplished physician-scientist to lead a major expansion of the Division of Pediatric Hematology-Oncology based at Children's Hospital in Columbus, Ohio. The Hospital and the Department have recently made a substantial commitment to augment an already outstanding clinical program.

The Director will hold The Elizabeth M. and Richard M. Ross Chair in Pediatric Research at Children's Hospital. She/he will be expected to build a robust research program, enhance clinical activities, recruit new faculty and fellows, and further the national and international prominence of the Division. A new clinical oncology ward is currently under construction, and the Division will occupy new laboratories to be built in the very near future.

Prospective candidates must be certified by the American Board of Pediatrics in Hematology-Oncology and should possess credentials appropriate for appointment at the rank of Professor at The Ohio State University. The ideal candidate will be expected to have a funded, peer-reviewed, investigator initiated research program in a relevant discipline. Moreover, he/she should be an outstanding clinician who is actively involved in patient care. The Director should have significant administrative experience and strong evidence of leadership potential.

The Department of Pediatrics at The Ohio State University consists of 115 full-time faculty who are housed on the campus of Children's Hospital. All of the major pediatric subspecialties are represented among the faculty. The Division of Pediatric Hematology-Oncology is currently comprised of 10 full-time faculty (7 M.D., 3 Ph.D.). The faculty also are members of the NCI-funded Comprehensive Cancer Center located on the Ohio State University campus at the Arthur G. James Cancer Hospital/Richard J. Solove Research Institute.

The Children's Hospital in Columbus is a 313 bed academic medical center that serves families in central Ohio and several surrounding states. Last year the hospital had over 11,000 inpatient admissions, while over 400,000 outpatient encounters were logged at on- and off-campus sites. An entirely new pediatric oncology wing is currently under construction and will support all of the major clinical activities of the Division including bone marrow transplantation.

Children's Research Institute, a separately incorporated subsidiary of Children's Hospital, Inc., is located on Children's campus and is housed primarily in the Wexner Institute for Pediatric Research. The Wexner Institute is a 125,000 sq. ft. research facility which contains state-of-the-art laboratories, a full-service vivarium, and administrative support space. Over the next 3 years, Children's Research Institute will build a second research building that will double the available research space. New laboratories in this building will be dedicated to the Division of Pediatric Hematology-Oncology.

Interested parties should forward a curriculum vitae and letter of interest to:

Philip R. Johnson, M.D. Room W591, Children's Hospital 700 Children's Drive Columbus, OH 43205 johnsonp@pediatrics.ohio-state.edu

Applications will be considered until the position is filled.

Children's Hospital, Inc. and The Ohio State University are Affirmative Action/Equal Opportunity Employers. Qualified women, minorities, Vietnam-era veterans, disabled veterans and the disabled are encouraged to apply.

# Discover Merck.

#### Employment opportunities in PA

Merck Research Laboratories, a world leader in biological and pharmaceutical research consistently ranked by *Fortune* among "America's Most Admired Companies," currently is seeking a Board Certified Anatomic Pathologist with a strong record of achievement and publication in basic molecular biology research to run our Molecular Histology Facility in West Point, PA.

This is a pathology research laboratory which performs in situ hybridization, immunohistochemistry, and other tissue-based gene expression studies on a wide variety of human and animal tissues, in support of basic target identification and validation studies throughout Merck Research Laboratories (MRL). Projects are generated both within the facility and by Merck collaborators. The ideal candidates should have an M.D. with clinical training and Board Certification in Anatomic Pathology, as well as a Ph.D. in molecular biology or related field, or equivalent research experience demonstrated by a strong publication record. Responsibilities will be to carry on independent research projects, as well as to consult with other Facility Ph.D. and M.A. scientists in interpreting human and animal tissue expression data, collaborate actively with scientists across MRL worldwide, coordinate project progress, and complete an ongoing expansion of the facility. Broad experience in anatomy, histology, in situ hybridization, immunohistochemistry, microscopy, and computerized image analysis are absolutely essential. Strong leadership and communication skills are a must, as this position will include a great deal of internal and external presentation, as well as publication.

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. To be considered, please submit your resume and cover letter, indicating salary requirements, to: Merck Positions, PAF Code: XHXMRSMKH04070, PO Box 92164, Los Angeles, CA 90009-2164. E-mail: merck@isearch.com Fax: (310) 337-3393. Qualified candidates will be contacted.



We are an equal opportunity employer, m/f/d/v.

#### Regulatory Affairs Program Manager

A Nashville, Tennessee based company dedicated to serving the needs of agriculture has a position immediately available for a Regulatory Affairs Program Manager. The candidate will be required to oversee all regulatory aspects of an international agriculture-based business in a changing and challenging environment. The successful applicant will have a Ph.D. or MBA and at least 3 to 5 years experience in a relevant discipline (biochemistry, cellular biology, genetics, or molecular biology). Pharmaceutical or agricultural industrial experience or familiarity with agricultural scientific research, laboratory safety regulations, and regulations pertaining to testing and commercialization of new plant products is highly desired. The candidate must have an appreciation of cultural diversity as well as exhibit excellent communication skills in both technical and business circles. They will also be expected to interact with internal and external scientists as well as with federal, state, local and international agencies that impact our business. Domestic and international travel will be required. Interested candidates should send their resume with salary requirements and references to:

Science, Box 89 1200 New York Ave., NW Washington, DC 20005 EEO/M/F/V/D

#### HARVARD MEDICAL SCHOOL

and





#### **Faculty and Postdoctoral Fellows**

are sought with outstanding backgrounds in one or more areas of

Molecular Biology Molecular Pathology Physics/Biophysics Cell Biology Immunology Biomedical Engineering Mathematical Modeling Physiology

The Edwin L. Steele Laboratory (MGH/HMS) is committed to improving the detection and treatment of cancer through a better understanding of tumor pathophysiology and transport barriers within tumors. We are actively recruiting for faculty and post-doctoral fellows to work in *angiogenesis, metabolic microenvironment, cell mechanics, and transvascular, interstitial or cellular transport.* Faculty working in these areas include Rakesh K. Jain, Yves Boucher, Lance L. Munn, Dai Fukumura and Kevin Burton. In addition, we are seeking **Technicians and Research Assistants.** Visit us at our Web site (http://steele.mgh.harvard.edu) for more detailed information.

Individuals must have a Ph.D. and/or M.D., appropriate research experience, strong organizational, interpersonal, communication, and computer skills and be prepared to work in a dynamic team environment. Applicants should send a C.V. and a career statement to: Rakesh K. Jain, Steele Laboratory of Tumor Biology, Dept. of Radiation Oncology, Massachusetts General Hospital, Cox-7, 100 Blossom St., Boston, MA 02114.



For more information about the research activities of the Steele Laboratory, please visit our web site at: http://steele. mgh.harvard.edu. The MGH is an Affirmative Action/Equal Opportunity Employer. Applications from women and members of minority groups are encouraged.

#### U.S. Department of Agricultural Agricultural Research Agricultural Research Service (ARS) Research Leader GS-14/15

The Pasture Systems & Watershed Management Research Unit, housed at Pennsylvania State University, has a challenging position for a Supervisory Soil Scientist, Hydrologist, or Research Agronomist. This individual will serve as Research Leader of the Unit, and be responsible for leading and participating with a team of 11 Research Scientists in the development and execution of a broad research program to identify, quantify, predict, and manage the interactions among physical, chemical, and biological mechanisms that control grazing land and crop production. This research will determine the impact of grazing and cropping uses, including management of animal manures, on nutrient and chemical losses to surface runoff and groundwater recharge; will develop methods to enhance off-site controls, both natural and constructed, for removing nutrients from agricultural drainage waters; and will develop and test dairy systems that are economically and environmentally sustainable. Candidates must have appropriate knowledge of soil science, environmental chemistry, agronomy, hydrology, geology, biology, ecology, and mathematics; ability to conduct research which characterizes and predicts the interaction among physical, chemical, and biological mechanisms of land, water, and plant management systems; and skill in developing such systems. U.S. citizenship is required. Salary commensurate with qualifications, \$70,457 to \$107,738 p/a. For information about the position contact Dr. Frank Greene at 215-233-6668 or at fgreene@naa.ars.usda.gov. For application, call Ms. Mary Ann Byrne at 215-233-6571. Visit the ARS Vacancy Web Site: www.ars.usda.gov/afm/hrd/ resjobs. Applications must be marked ARS-X0E-0160, completed and postmarked by May 1, 2000.

> USDA/ARS is an Equal Opportunity Employer. Women and minorities are encouraged to apply.

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Our environments stimulate consistent and significant results. In addition, the support to excel in energetic and challenging work is supported by extraordinary resources, excellent compensation packages, and career-long learning. Get in touch. Forward your resume to: SmithKline Beecham Pharmaceuticals, Ad Code: 00582K, P.O. Box 40047, Philadelphia, PA 19106.

Or visit www.sb.com/careers for more information and/or to apply online.

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mayo

#### MAYO CLINIC POSTDOCTORAL FELLOWSHIP IN STRUCTURAL BIOLOGY

An NIH-funded postdoctoral fellowship is available for an American Citizen or a permanent U.S. resident to perform structural studies of novel Sp1-like transcriptional repressor proteins. This position will be part of an intense collaborative effort among biochemists, molecular biologists, and structural biologists. Applicants should be a competent structural biologist. Experience in NMR, biochemical analysis of protein-DNA interactions, and/or protein crystallization are desirable. Send a curriculum vitae, a description of research experience, and three academic references to:

Raul Urrutia, MD/Franklyn Prendergast, Md, PhD Mayo Clinic Alfred 2-435 200 First Street SW Rochester, MN 55905 Fax: 507/255-6318 E-mail: urrutia.raul@mayo.edu

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

#### NATIONAL INSTITUTES OF HEALTH NATIONAL EYE INSTITUTE

#### **Job Opportunities**

The National Eye Institute Intramural Program at the NIH campus, Bethesda, MD., is seeking highly qualified Postdoctoral Fellows, Research Associates and Staff Scientists in the following areas:

- Molecular Biology
- BiochemistryEpidemiology
- Cell Biology
  Immunology
- Biostatistics
- Psychophysics

Salaries range from \$29,000 to \$118,400 per annum, based on experience and type of appointment.

NEI offers an extensive benefits package that you may be eligible for, depending on the appointment mechanisms: Health Benefits, Life Insurance, Retirement Benefits, Annual and Sick Leave, Formal Training Program, Recruitment Bonus, Retention Allowance, Relocation Allowance, Loan Repayment Program, and Travel Benefits.

Candidates interested in specific job opportunities at the NEI may visit the NEI web site at http://www.nei.nih.gov/ listing the most current positions available.

NIH/NEI is an Equal Opportunity Employer
## GORDON RESEARCH CONFERENCES

Conferences at the Frontiers of the Biological, Chemical and Physical Sciences

• The full 2000 Summer and Fall GRC schedule appeared in the February 11, 2000 issue of *SCIENCE*.

## 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!

#### POSITIONS OPEN

FACULTY POSITION IN TUMOR AND TRANSPLANT IMMUNOLOGY

The Eppley Institute for Research in Cancer of the University of Nebraska Medical Center (UNMC) is seeking Ph.D. or M.D. applicants at all levels for a TENURE-TRACK POSITION in the general area of tumor or transplant immunology. The Eppley Institute is involved in a multidisciplinary effort focused on research in cancer and is part of the NCI-designated UNMC/Eppley Cancer Center. In addition to directing an independent research program, the successful applicants will be able to interact with clinical faculty that are nationally recognized for the use of transplantation to treat malignant, inherited, and autoimmune diseases. Opportunities exist to collaborate in nationally funded programs of basic and clinical research in immunotherapy and immunobiology. It is also anticipated that Eppley faculty will be involved in the training of graduate students and Postdoctoral Fellows through Eppley's NCI-supported Cancer Research Training Program.

Applicants should send their résumé, names of three references, and a letter detailing their research goals to: Dr. Ken Cowan, Director, Eppley Institute for Research in Cancer, University of Nebraska Medical Center, 986805 Nebraska Medical Center, Omaha, NE 68198-6805.

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

#### JUNIOR FACULTY POSITION

A resourceful individual with at least two to three years of postdoctoral experience in cellular physiology/biochemistry is needed to joint a vibrant and expanding basic research program in a clinical department at the Wake Forest University School of Medicine. Experience with molecular biology techniques would be an advantage. Send curriculum vitae and names of three references to: **Box 5125**, **Winston-Salem**, **NC 27113-5125**.

#### POSITIONS OPEN

#### BOSTON UNIVERSITY SCHOOL OF MEDICINE

The Department of Pharmacology of Boston University School of Medicine is seeking candidates for FACULTY POSITIONS. Applications are invited from accomplished Scientists in fields broadly related to the pharmacological sciences. Start-up funds, core facilities, and modern laboratory space are available. Candidates at all levels with active research funding will be considered. Please send curriculum vitae, a brief statement of research plans, and the names and telephone numbers of at least three references to: Dr. David H. Farb, Department of Pharmacology and Experimental Therapeutics, Boston University School of Medicine, 715 Albany Street, Boston, MA 02118. Equal Opportunity/Affirmative Action Employer.

#### ASSISTANT PROFESSOR CLINICAL ANATOMY Department of Biomedical Sciences Creighton University School of Medicine Omaha, Nebraska

Applications are invited for a tenure-track faculty position at Assistant or Associate Professor level to teach clinical human gross anatomy. Research can be in developmental, cell, or molecular biology with extensive opportunities for collaboration with existing faculty. Applicants should send curriculum vitae, a description of research plans and teaching interests, and the names of three references to: Richard F. Murphy, Ph.D., Chairman, Department of Biomedical Sciences, Creighton University School of Medicine, 2500 California Plaza, Omaha, NE 68178-0405. E-mail: barrym@creighton.edu.

#### POSITIONS OPEN

DIRECTOR OF MOLECULAR MEDICINE PROGRAM: Cleveland State University (CSU), in association with the Cleveland Clinic Foundation (CCF), invites applications for a tenured **ASSOCI-ATE PROFESSOR** position as Director of the new joint Molecular Medicine Program beginning fall 2000. The CSU/CCF Molecular Medicine Program will expand the existing joint Doctoral programs in regulatory biology, clinical-bioanalytical chemistry and applied biomedical engineering. The primary responsibility of the Director is to guide the development of the new program while maintaining an independent research program in an area related to mo-lecular medicine at CSU. The Director will be appointed in the appropriate department at CSU and will hold a joint appointment at CCF's Lerner Re-search Institute. The applicant must have a Ph.D. and/or M.D. in a field related to biomedical sciences including but not limited to biochemistry, chemistry, molecular and cellular biology, chemical engineering, or biomedical engineering. Additionally, the successful applicant must demonstrate proven ability to develop an externally funded, independent research program and to effectively teach courses in his/her spe cialty. Research expertise in areas related to molecular medicine that complements existing research at CSU and CCR is especially desirable, as is administrative experience in a research or academic setting. Review of applications will begin on May 15, 2000, and will continue until the position is filled. Send curriculum vitae, a description of ongoing research projects and current funding, a statement of teaching experience, and arrange for three letters of recommendation to be sent to: Dr. Lily Ng, Chair, Molecular Medicine Program Search Committee, Department of Chemistry, Cleveland State University, Cleveland, OH 44115. Telephone: 216-687-2467; FAX: 216-687-9298; e-mail: 1.ng@csuohio.edu. Cleveland State University is an Affirmative Action/Equal Opportunity Employer committed to nondiscrimination. Minorities/ Females/Disabled/Veterans encouraged.

#### OUTSTANDING BIOTECHNOLOGY OPPORTUNITY IN BALTIMORE

## LABORATORY DIRECTOR for

#### New, Dynamic Biotech Company

The Virco Group is an international research based biotechnology company, applying the most advanced technologies in molecular biology, genomics, automation and electronic data processing to the diagnosis and disease management of HIV, other infectious diseases and cancer.

We are looking to fill the key position of Laboratory Director of Virco Lab Inc., the US subsidiary of our dynamic and rapidly growing company.

You will manage a small, but fast expanding team providing HIV genotypic resistance testing and molecular assays for early diagnosis of cancer, in our newly established laboratory, situated on the Johns Hopkins Bayview Campus in Baltimore, Maryland.

Responsibilities will include:

- Overall operation and administration of the laboratory function to ensure quality patient care services.
- Validation and sign-off on all laboratory results to the highest medical and quality control standards.
- Providing interpretation and advice to customers on the results of assays conducted in the laboratory.
- Providing technical supervision and continuing education to a team of 2 Lab Managers and 10 Technologists and Technicians.
- Implementation and monitoring of performance standards to meet the highest levels of US and international regulatory and quality assurance standards.
- Reporting to the Chief Operating Officer, VIRCO LAB INC., and liaising with worldwide Production, QA and R&D functions within the company.

#### Position Requirements include:

- Physician or PhD with sufficient laboratory management experience to meet the standards of the College of American Pathologists and the Clinical Laboratory Improvement Amendments of 1998.
- At least 5 years experience in the field of molecular biology, with practical experience in HIV and Oncology a definite plus.
- Experience of leading and motivating a team of technologists and recently graduated technicians.

If you have excellent communication skills, can work both independently and at the same time, be a key team player, and are interested in an exciting new opportunity, send or email your resume to:

> Wim Swyzen, VIRCO LAB INC Alpha Center 3rd Floor Johns Hopkins Bayview Campus 5210 Eastern Avenue Baltimore, Maryland 21224 wim.swijzen@virco.be



the stimulating environment. The opportunity to work independently while contributing to a team. The opportunity to make a difference – to leave your mark. It's about food, health, hope and an exciting future as we merge with Pharmacia and Upjohn.

SEARLE

## Biochemist/Cell Biologist (Ph.D. level)

We require a candidate to work in a multidisciplinary team to develop and implement high throughput screening assays for drug discovery in the areas of oncology, cardiovascular disease and inflammation. Responsibilities include collaboration with discovery biologists for the development of screening assays including enzymatic, ligand binding with an emphasis on whole cell formats. You would also collaborate with discovery chemists for lead follow-up. Implementation of high throughput screens will require you to operate state-of-the-art, semiautomated and fully automated microplate workstations and robotics and to collect and analyze screening data.

A Ph.D. in biochemistry or cell biology with at least two years of postdoctoral experience or the equivalent and the ability to work in a team environment to reach common goals are required. Expertise in high throughput screening, cell biology (especially in whole cell assay development) is necessary. Preferred candidates will have strong computer skills including experience with Excel and data visualization as well as some programming experience in Visual Basic. Ad Code: 00-1308

#### **Research Biologist**

We are seeking a scientist to work in a team environment with primary technical focus on production of recombinant proteins from mammalian cell culture. Expectations include designing and executing experiments to optimize cell density and product yield in bioreactors, including media optimization, nutrient feed, and reactor parameters. Responsibilities will include clone selection, cell banking, media selection/optimization, scale-up, and bioreactors operation. A working knowledge of molecular biology, protein analytics and protein purification is needed.

The ideal candidate will possess a BS/MS in the biological sciences and a minimum of 3-5 years of industrial experience. Previous experience in large scale cell culture is highly desirable. Must be able to work independently within the framework of the team goals. Good written and verbal communication skills, as well as organizational skills are required. Knowledge of cGMP's is a plus. Ad Code: 99-1291

Searle is the pharmaceutical sector of the Monsanto Company. These positions are located in St. Louis, MO. We offer a competitive salary, stock options and benefits package including tuition reimbursement and 401(k). For fastest consideration please submit your resume to: Staffing- Ad Code (selected from above), 700 Chesterfield Parkway, MailZone BB40, Chesterfield, MO 63198. EEO/AA Employer M/F/D/V. Please visit our website at: www.searle-ican.com



The new Department of Earth, Ecological, and Environmental Sciences (EEES), University of Toledo, invites applications for **TENURE-TRACK FAC ULTY POSITIONS** in the areas of bioremediation (plant physiological ecology, plant molecular biologyphytoremediation, environmental microbiology); conservation biology (vertebrates or invertebrates); hydrology (surface water/drainage basins); and sedimentology (Holocene nonmarine). Rank is open and salary negotiable. These positions will be filled by August 2001 but could begin as early as August 2000 if exceptional candidates are available. The commit tees will begin evaluating applications on April 28, 2000, and continue until all positions are filled.

The University of Toledo is developing a multidisciplinary program in environmental sciences that focuses on issues of particular relevance to the Great Lakes region. The Department of EEES currently includes seven geologists and six ecologists, offers B.S. degrees in environmental sciences and geology, M.S. degrees in geology and biology (ecology), and a Ph.D. degree in biology (ecology). Additional degrees in environmental sciences at the M.S. and Ph.D. levels are being developed. In addition to the positions advertised herein, EEES will share two new positions in remote sensing and geographical information systems being sought by the Department of Geography and Planning.

Candidates must have a Ph.D. in an appropriate discipline, a strong research agenda, and interest in becoming active members of an interdisciplinary team of scientists focused on Lake Erie Basin research utilizing the University's Lake Erie Center, Stranahan Arboretum, and Plant Science Research Center. Candidates are expected to teach at the graduate and undergraduate levels in their areas of interest and direct graduate research. Candidates are invited to visit our website: www.ecescience@utoledo.edu.

Applicants should submit curriculum vitae, statements of teaching and research interests, and the names and addresses of three references to: Search Committee, Department of Earth, Ecological, and Environmental Sciences, University of Toledo, Toledo, OH 43606-3390. The University of Toledo is an Equal Opportunity, Equal Access, Affirmative Action Employer and Educator. Minorities/Females/Veterans/Disabled are encouraged to apply.

#### FACULTY POSITION ANALYTICAL OR ENVIRONMENTAL CHEMISTRY Department of Chemistry Simon Fraser University

The Department of Chemistry at Simon Fraser University invites applications for a tenure-track **AS SISTANT PROFESSOR** position in analytical or environmental chemistry to take effect in September 2001 subject to final budgetary approval. Outstanding candidates with a commitment to excellence in research and teaching are being sought. NSERC UFA and joint appointments with other organizations will also be considered. The successful candidates will be expected to develop and maintain both an innovative externally funded research program and an excellent teaching record at both the undergraduate and graduate levels.

Applicants should send a complete résumé; a research proposal; and a list of three individuals willing to act as references with their addresses, telephone and/or FAX numbers, and e-mail addresses. All correspondence should be sent to: Professor B. Mario Pinto, Chair, Department of Chemistry, Simon Fraser University, 8888 University Drive, Burnaby V5A 1S6 British Columbia, Canada. Evaluation of applications will commence August 1, 2000. Simon Fraser University is committed to the principle of Equity in Employment and offers Equal Employment Opportunities to qualified applicants. In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents of Canada. If a suitable candidate from among qualified Canadian citizens or permanent residents cannot be found, other qualified applicants may be considered.

#### POSITIONS OPEN

#### FACULTY POSITION MOLECULAR PATHOGENESIS

The Virginia-Maryland College of Veterinary Medicine at the University of Maryland, College Park, Maryland, invites applications from qualified individuals for a nine-and-one-half month, TENURE-TRACK FACULTY POSITION in molecular pathogenesis. Minimum qualifications include a Ph.D. degree in microbiology, molecular biology, or related field. The position responsibilities are divided into 70% research, 15% teaching, and 15% service. Candidates should demonstrate evidence of experience in molecular biology/microbiology and possess a willingness to work with microbial agents involved in foodborne illness. Areas of interest might include but are not limited to host-pathogen interactions, virulence factors, pathogen detection, or microbial ecology. The successful candidate will be expected to develop an active, extramurally funded research program and work in a multidisciplinary environment. xcellent opportunities exist for collaboration with federal agencies (USDA, FDA, NIH) and other University departments. Salary will be commensurate with experience.

Submit a letter of application; curriculum vitae; statement of career goals; and names, addresses, and telephone numbers of three references to: Dr. Robert M. Dyer, Chair, Search Committee, Virginia-Maryland Regional College of Veterinary Medicine, University of Maryland, 8075 Greenmeade Drive, College Park, MD 20742-3711. Telephone: 301-935-6083, extension 110; FAX: 301-935-6079; e-mail: rd70@umail.umd.edu. Applications will be accepted until April 28, 2000, or until a suitable candidate is selected.

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

Virginia Institute for Psychiatric and Behavioral Genetics, Department of Psychiatry, Medical College of Virginia of Virginia Commonwealth University, Richmond, is recruiting two full-time **TENURED** or **TENURE-TRACK RESEARCH SCIENTISTS** to apply methods of linkage, linkage disequilibrium, and positional cloning to neuropsychiatric disorders including major depression, schizophrenia, and nicotine dependence. Will join active, well-funded research team with emphasis on quantitative genetic methods. Responsibilities include collaborative supervision of several ongoing research projects. Candi-dates expected to establish own research program in molecular genetics of neuropsychiatric disorders. M.D. or Ph.D. and advanced research training in human molecular genetics, gene mapping, and/or bioinformatics required. Will consider two applicants seeking to come as team. Send curriculum vitae and references to: Dr. K. Kendler, Psychiatry, P.O. Box 980126, Richmond, VA 23298-0126. E-mail: Kendler@hsc.vcu.edu. Equal Employment Opportunity/ Affirmative Action Employer. Women, minorities, and persons with disabilities encouraged to apply.

#### ASSISTANT/ASSOCIATE PROFESSOR INSTITUTE OF CHEMICAL TOXICOLOGY WAYNE STATE UNIVERSITY

A tenure-track faculty position is available at the rank of ASSISTANT/ASSOCIATE PROFES-SOR in the Institute of Chemical Toxicology, Wayne State University. The institute offers a research-intensive environment, a highly contemporary equipment and technology base, and is home to the NIEHSfunded Environmental Health Sciences Center in Molecular and Cellular Toxicology with Human Applications. The primary research area of interest focuses on toxicant effect on intracellular signaling and transcription factors in the regulation of gene expression and cell cycle control. Highly competitive salaries, start-up funds, and contemporary research facilities are available. Additional information may be found at website: http://www.wayne.edu/ehsctr. Applicants should send a curriculum vitae, a brief statement of research interests, and the names of three references to: Dr. Raymond F. Novak, Director, Institute of Chemical Toxicology, 2727 Second Avenue, Detroit, MI 48201. Wayne State University is an Equal Opportunity/Affirmative Action Employer

#### 7 APRIL 2000 VOL 288 SCIENCE www.sciencemag.org

#### POSITIONS OPEN

#### MARINE MICROBIOLOGIST UNIVERSITY OF NEW HAMPSHIRE

The Department of Microbiology, University of New Hampshire, is seeking applicants for a tenurc-track faculty position at the ASSISTANT PROFES-SOR level with an anticipated starting date of September 2000. The successful candidate is expected to be an active participant in the Marine and Aquaculture programs since the University is a land grant/sea grant/space grant institution. Applicants must possess a Ph.D. in microbiology and will be expected to have a strong commitment to research, along with the ability to attract extramural funding. In addition, he/ she will have an active role in the undergraduate as well as M.S. and Ph.D. programs in the Department. Postdoctoral or equivalent experience is required. Teaching responsibilities will include a course in marine microbiology and university general education course in microbiology. Additional academic responsibilities will include such activities as undergraduate student advising, supervision of undergraduate independent studies, and committee assignments. Interested individuals should send their curriculum vitae, a brief statement of teaching and research interests, representative publications, and the names of at least three references to: **Dr. Louis S. Tisa, Department** of Microbiology, Rudman Hall, University of New Hampshire, Durham, NH 03824-2617. The search will remain open until an appropriate candidate is found. The Department, which is part of the College of Life Science and Agriculture, has about 100 undergraduate majors and 25 graduate students. Further information regarding the Department can also be obtained from our website: http://microbiology. unh.edu. University of New Hampshire is committed to excellence through diversity among its faculty and strongly encourages women and minorities to apply.

#### UNIVERSITY OF FLORIDA SHANDS CANCER CENTER

The University of Florida Shands Cancer Center (UFSCC) is recruiting for an ASSOCIATE PRO-GRAM DIRECTOR/LECTURER. A Master's degree is required. This faculty position will be responsible for the overall administration of the UFSCC. The Associate Program Director/Lecturer will be involved in the planning and development of the University of Florida Shands Cancer Center in seeking to obtain a National Cancer Center (NCI) designation. The Associate Program Director/Lecturer will also be involved in developing exploratory/planning grants as well as helping to develop center core grants and program project grants. The applicant should have extensive knowledge concerning federal granting agencies, specifically the National Institutes of Health (NIH) and the National Cancer Institute. Previous experience in the administrative operations of an NCI-designated cancer center is highly desirable.

The Associate Program Director/Lecturer will coordinate and interact with the faculty and staff in the UFSCC, as well as the Colleges of Medicine, Dentistry, Pharmacy, Nursing, Veterinary Medicine, Health Professions, and other colleges at the University of Florida. The application deadline is April 30, 2000. Salary is negotiable depending on experience. The anticipated start date is June 1, 2000.

Please send applications to: Tom V. Harris, Chair, Search Committee, University of Florida, J. Hillis Miller Health Science Center, P.O. Box 100014, Gainesville, FL 32610-0014.

#### ASSISTANT PROJECT SCIENTIST (FACULTY POSITION) MOLECULAR BIOLOGY/IMMUNOLOGY University of California San Diego

A Ph.D. trained in molecular biology and immunology will participate in an NIH-sponsored research program investigating mechanisms of allergic inflammation. Research will require expertise with cloning, RT-PCR, *in situ* hybridization, immunochemistry, and supervision of research associates and postdoctorals. Send curriculum vitae to: David Broide, M.D., University of California San Diego, Basic Science Building, 9500 Gilman Drive, La Jolla, CA 92093-0635. E-mail: dbroide@ucsd.edu.

## Science Advisor

#### Neuroscience at the New Millennium - Be a Part of It!

The National Institute of Neurological Disorders and Stroke, National Institutes of Health, seeks a neuroscientist to support its efforts to reduce the burden of neurological disease. Position in strategic planning/reporting/legislative office requires a doctorate degree or equivalent level of experience in neuroscience.

Successful candidates will have demonstrated ability in written and oral communications and in analysis of scientific and public policy issues.



Salary range \$51,204 to \$79,155, depending on qualifications. US citizenship required.

For application by fax call (800) 728 JOBS, request Fax#5016 or via the NINDS homepage: http://www.ninds.nih.gov/hrb. Announcement #NS-00-0218. For questions contact Mr. Jones at (301) 496-6334. Applications are due by 5/19/00.

NINDS is an Equal Opportunity Employer.



### The University of Texas Health Science Center at San Antonio

**Dental Diagnostic Science - Chair** 

The University of Texas Health Science Center at San Antonio seeks nominations and applications for the position of Chair in the Department of Dental Diagnostic Science. The unique breadth of this Department includes areas of strength in the newly recognized specialty of oral and maxillofacial radiology, as well as forensic odontology, oral diagnosis/oral medicine, research, patient management systems and geriatrics/gerontology. The responsibilities of this position include department administration, faculty and staff development, and management of educational programs and research and service activities. Applicants must have a DDS/DMD degree or equivalent. The successful candidate will be an individual with demonstrated vision and creativity with regard to dental education, health care and research. In addition, the candidate will exhibit highly developed academic leadership capabilities and outstanding academic credentials. Intramural practice opportunities are available. Rank and salary will be commensurate with experience and qualifications. The search process will begin immediately, and will continue until the position is filled. Send a letter of intent, curriculum vitae, and the names and addresses of three references to Dr. Ken M. Hargreaves, Chair of Search Committee, Mail Code 7892, 7703 Floyd Curl Drive, San Antonio, TX 78229-3900. The University of Texas Health Science Center at San Antonio is an Equal Opportunity Employment/Affirmative Action Employer.

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#### ASSOCIATE MOLECULAR/CELL BIOLOGIST

Assisting a Sr. Molecular/Cell Biologist, you will be involved in enzyme assay, purification, and cell-based and HTS assay development. Additional responsibilities include cell culture work for immunofluorscence, cytometric studies and computer analysis of data. The qualified candidate must possess a Bachelor's degree in Molecular or Cell Biology, strong experience in cell culture plus molecular skills such as transfection, cloning and mutagenesis. Experience in HTS assay development and computer database management is helpful. Knowledge of cell cycle/kinases and/or microscopy will be an asset. Ad Code: 2K-KDA1127

#### ASSOCIATE CHEMIST

The qualified candidate we select will be responsible for synthesis, isolation, and characterization of novel organic compounds as candidates for drug discovery in a variety of therapeutic areas. Knowledge and experience with multi-step synthetic sequences, chromatographic purification and modern spectroscopic methods highly desirable. A Bachelor's degree in Chemistry is required; Master's degree in Organic Chemistry is strongly preferred. Industrial internship with experience in organic synthesis is helpful. Ad Code: 99-KDA1740

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#### ASSISTANT PROFESSOR PLANT EVOLUTIONARY GENETICIST DEPARTMENT OF BIOLOGICAL SCIENCE Southeastern Louisiana University

Southeastern Louisiana University is seeking applicants for a Botanist involved in evolutionary genetics research for a tenure-track Assistant Professor position in the Department of Biological Sciences, avail-able fall 2000 or spring 2001. We seek an evolutionary geneticist working at any phylogenetic level from populations to higher taxa. The applicant should have broad knowledge in plant systematics and be capable of teaching traditional botany, plant toxonomy, and genetics as well as modern plant systematics. The successful candidate will be expected to establish an active research program, participate in our graduate program, and develop undergraduate and graduate courses in botany and their area(s) of expertise. Qualifications: Ph.D., postdoctoral experience, a strong background in integrative biology, and commitment to excellence in teaching at both the undergraduate and Master's levels. Salary is commensurate with experience and qualifications. To guarantee review, application materials must be received by May 6, 2000. Position will remain open until a qualified candidate is identified. Send letter of application, statement of research interests, summary of teaching philosophy, copies of relevant publications, curriculum vitae, three current letters of reference, and a copy of ALL transcripts (originals required upon employment) to: Chair, Plant Evolutionary Geneticist Search Committee, Southeastern Louisiana University 10736, Hammond, LA 70402. SLU is an Affirmative Action/ Americans With Disabilities Act/Equal Employment Opportunity Employer.

The Department of Physiology and the Respiratory Sciences Center at The University of Arizona, College of Medicine, invite applications for a tenure-track po-sition at the rank of ASSISTANT PROFESSOR or at the ASSOCIATE PROFESSOR level for excep-tionally well-qualified candidates. Preference will be given to candidates with expertise in molecular genetic and cellular approaches to understanding functional aspects of asthma, allergic inflammation, or airway regulation. The successful candidate will be expected to establish a vigorous independent research program and contribute to teaching in graduate and medical systems physiology courses. Qualifications include the Ph.D., M.D., or equivalent and two or more years of postdoctoral training. Candidates with demonstrated experience in teaching and success in acquiring independent funding are especially encouraged to apply. Position is available beginning July 1, 2000. Review of applications will begin April 10, 2000, and contin-ue until the position is filled. Submit a letter of application, a summary of teaching and research goals, curriculum vitae with the names of three references, and three reprints to: Job Number 995172, Janis M. Burt, Ph.D., Head of the Search Committee, Department of Physiology, The University of Ari-zona, Tucson, AZ 85724-5051. More information can be found at websites: http://www.physiol. arizona.edu/ and http://www.respsci.arizona. edu/. The University of Arizona is an Equal Employment Opportunity/Affirmative Action Employer; Minorities/Women/Disabled/Veterans.

The Medical University of South Carolina seeks to fill the Jeffrey Gilliam Memorial Chair for the study of neurodevelopmental disorders. Rank will be at a level of **PROFESSOR**, and the candidate must have an M.D. with evidence of the ability to sustain an extramurally funded research program. Candidate must have research experience in the biological underpinnings of neurodevelopmental and will have a joint appointment in the Department of Physiology/Neuroscience. Candidate should send curriculum vitae, a list of three individuals to contact as references, and a letter containing a research summary to: **Peter Kalvias**, **Ph.D.**, Gilliam Chair Search Committee, Department of Physiology and Neuroscience, Medical University of South Carolina, 650 MUSC Complex, Suite 607, Charleston, SC 29425. Telephone: 843-792-4424.

#### POSITIONS OPEN

#### HEAD, DIVISION OF MEDICINAL AND NATURAL PRODUCTS CHEMISTRY University of Iowa College of Pharmacy

The division of Medicinal and Natural Products Chemistry (MNPC) invites applications for the posi-tion of Head of the Division at the rank of **TEN-URED FULL PROFESSOR**. The new Division Head is expected to bring a well-funded and internationally recognized program of research, to be committed to excellence in teaching at the professional and graduate levels, in mentoring faculty, in directing students, and in fostering interdisciplinary research. Preference will be given to applicants with demon-strated expertise in the following or related fields pertinent to medicinal and natural products chemistry: drug design with emphasis on neurosciences; structural biology and molecular recognition; computational biology; biology, biochemistry, bioorganic chemistry, and genetics of natural products; and pharmaceutical biochemistry or pharmacological sciences with emphasis on drug metabolism or multidrug resistance. The MNPC division offers the M.S. and Ph.D. degrees and participates in the Pharm.D. degree program for pharmacy students. Divisional faculty conduct vigorous extramurally funded research with interdisciplinary connections to other divisions of the College of Pharmacy; academic departments in the Colleges of Medicine, Engineering, and Liberal Arts; and the Center for Biocatalysis and Bioprocessing. More information about the MNPC division may be found at website: http://www.uiowa.edu/ ~mnpcphar/. Applicants should submit curriculum vitae, a concise description of research interests, and a list of four references to: Professor Michael W. Duf-fel, Chair, Search Committee, Division of Medicinal and Natural Products Chemistry, College of Pharmacy, University of Iowa, Iowa City, Iowa 52242. Inquiries may be addressed by e-mail: michael-duffel@uiowa.edu. The University of Iowa is an Equal Opportunity/Affirmative Action Employer. Women and underrepresented minorities are encouraged to apply.

#### FACULTY POSITION DERMATOLOGY

The Department of Dermatology at Columbia University invites applicants for an ASSISTANT PROFESSOR position. Experience in cutaneous gequired. Applicants must have an M.D. degree, be Board-certified in dermatology, and have a background in clinical investigative dermatology. Proven ability to obtain grant funding is highly preferred. Special consideration will be given to candidates with current grant funding. Interested individuals should send their curriculum vitae and three letters of recommendation to: Catherine Donovan, Department of Dermatology, Columbia University, 630 West 168th Street, New York, NY 10032. FAX: 212-305-7391; e-mail: cd11@columbia. edu. Columbia University is an Affirmative Action/Equal Opportunity Employer and is particularly intrested in qualified minority and women applicants.

#### RESEARCH ASSOCIATE IMMUNOMODULATOR IN HIV INFECTION

M.D., M.D./Ph.D., or Ph.D. with relevant experience to lead a project examining the impact of a new clinical immunomodulator on HIV disease by measuring both flow cytometry-based lymphocyte markers and functional studies of lymphocytes in patients undergoing therapy. Good laboratory and clinical nursing support will be available for this project as well as laboratory measurements of the usual viral load toxicity and lymphocyte parameters. Salary is set at **ADVANCED FELLOW-JUNIOR FACULTY** level. Experience and knowledge of lymphocyte HIVspecific and functional nonspecific measurements in HIV disease are required. Send curriculum vitae and bibliography and three letters of recommendation to: **Thomas C. Merigan, M.D., Director, Center for AIDS Research at Stanford, Stanford University, Stanford, CA 94305-5107**. *Stanford is Equal Opportunity Employer/Affirmative Action.* 

#### POSITIONS OPEN

#### GENOMICS RESEARCH ASSISTANT PROFESSOR

A position as leader of the Genomics Core Research Facility is available at the University of Nebraska-Lincoln Center for Biotechnology. We are looking for a dynamic scientist to develop and lead the Genomics CRF as an interdisciplinary laboratory that works with University of Nebraska-Lincoln researchers to analyze the genomes of plants, animals, and microorganisms. Technologies such as high-throughput sequencing, expression profiling (microarray technology), and robotics will be an integral part of this facility, fully integrated with the bioinformatics resources. The candidate should hold a Ph.D. in biochemistry, genetics, or related discipline, and documented postdoctoral experience in genomics. The incumbent will hold an appointment as Research Assistant Professor (nontenure track) in one of the life sciences academic departments of the University and is expected to develop active interdisciplinary research collaborations with faculty to establish and extend extramurally funded research programs. The Genomics Core Research Facility is located in the new George W. Beadle Center, which houses the majority of the Core Facilities and 22 bioscience research laboratories. More information is available at website: http://www. biotech.unl.edu. Screening of applications will begin May 12, 2000. Please contact: Dr. Ruben Donis, N300 Beadle Center, University of Nebraska, Lincoln, NE 68588-0665. Telephone: 402-472-2635; e-mail: rdonis@unl.edu. The University of Nebraska is committed to a pluralistic campus community through Affirmative Action and Equal Opportunity and is responsive to the needs of dual-career couples. We assure reasonable accommodation under the Americans with Disabilities Act; contact: Dr. Rubin Donis, Telephone: 402-472-2635, for assistance.

#### ASSISTANT PROFESSOR OF ENTOMOLOGY

Cornell University/New York State Agricultural Experiment Station, Geneva, New York. We invite applications for this 12-month tenure-track position to develop a nationally recognized research (80%) and extension (20%) program, which improves the management of arthropods affecting vegetable crop systems. The objective is to develop cost-effective, durable, and environmentally sound pest management strategies through an understanding of the principles of landscape ecology and insect population ecology and genetics. A Ph.D. and experience commensurate with the responsibilities of the position are required. The successful candidate will have a strong background in landscape ecology and population genetics including but not limited to those processes that influence areawide changes in arthropod abundance and population genetics. An applicant should submit a letter of application stating career goals and a research strategy for the first three years (up to three pages), academic transcripts, résumé, and the names and addresses of four references to: Dr. Anthony Shelton, Chair of the Search Committee, Cornell University-NYSAES, Department of Entomology, Barton Laboratory, Geneva, NY 14456. For further information, the position may be viewed at website: http://www.nysaes.cornell.edu/ent/.

NOAA's Damage Assessment Center is seeking qualified individuals for its three Regional Manager positions. Specific responsibilities include supervising staff, performing scientific and economic assessments of cases involving damages to NOAA trust resources, and implementing and interpreting the intent of statutes and developing new regulations having national significance. Mandatory qualifications include knowledge and experience in natural resource damage assessment (NRDA) approaches and methods. Deadline: postmarked by May 2, 2000. For more information, see website: http://www.darp.noaa.gov.

NOAA does not condone or tolerate discrimination based on race, color, religion, sex, national origin, age, physical or mental disability, or sexual orientation.



Staff-Scientist - Flow Cytometry Intramural Research Program National Institute of Arthritis and Musculoskeletal and Skin Diseases

National Institutes of Health

The National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS) of the National Institutes of Heath is seeking exceptional candidates to fill the position of Staff Scientist - Flow Cytometry in the Autoimmunity Branch of the Intramural Research Program (IRP) of NIAMS, NIH. The successful candidate will manage a newly established flow cytometry laboratory that has a 3 laser FACSVantage with turbo sort for sorting and a FACcaliber for analysis and all supporting equipment, computers and software. Plans to add a Cytomation MoFlo high-speed sorter are being developed. The individual will be responsible for managing and organizing the laboratory and the design of specific projects. Candidates must have either an M.D. or Ph.D. degree and professional knowledge and experience in contemporary flow cytometry sufficient to independently organize and conduct clinical and basic inmunologic research using this technology.

Applicants should submit their curriculum vitae and bibliography to:

Dr. Peter Lipsky c/o Scott Sigley, NIAMS, HRMB Building 31, Room 4C13 31 Center Drive, MSC 2350 Bethesda, MD 20892-2350 or email ss403p@nih.gov Applications must be postmarked by 5/15/00

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## MAYO CLINIC Director of Research Computing Facility

The Mayo Clinic in Rochester, Minnesota (http://www.mayo.edu) is seeking a Director of its Research Computing Facility. The Research Computing Facility (RCF) (http://www.mayo.edu/research/ref) is a highly prized core component of the Mayo Clinic research infrastructure that provides information technology services to the diverse Mayo research community. The 25 members of the RCF staff collaborate with approximately 500 career scientists and clinicians actively engaged in research and interact with the larger Information Technology group that supports foundation-wide computing. The Director is expected to provide leadership in formulating strategic planning initiatives for information technology applied to research with a strong focus on informatics related to biological and medical information. The plethora of available biological and medical data requires the integration of computing with research experimentation. Informatics support is vital to scientists and physicians in order to "visualize" their data and compare it with genomic, structural, and literature information. The ideal RCF director will be a visionary with considerable current knowledge of computer technology (hardware and software), web development, informatics, as well as genomics and biology. The Director must also be a proven leader and manager, with excellent skills in organization and budgeting, as well as a demonstrated appreciation for the importance of customer service in a research environment. A capacity to communicate and work effectively with research staff and senior administration is essential. This is a full time professional position with a competitive compensation and benefits package.

The Mayo Clinic is located in Rochester, Minnesota (http://www.rochesterusa.com), approximately an hour from the Minnesota/St. Paul metropolitan area. Rochester has excellent schools, a cosmopolitan cultural atmosphere, growing economy, clean environment, and has been rated one of the best places to live in the USA by Money Magazine.

Candidates should have a Ph.D. in Computer Science, Bioinformatics, Computational Biology, or a closely aligned quantitative science, with significant professional experience in management and leadership in a research or clinical environment, as well as demonstrated knowledge of technological advancements. Applications will be accepted until the position is filled, but preference will be given to applications received by May 31, 2000. Potential applicants for this position should submit a cover letter expressing their interest and qualifications, their curriculum vitae or resume and three letters of recommendation to:

Daniel J. Schaid, Ph.D., Chair, RCF Director Search Committee Harwick 7 Mayo Clinic 200 First Street SW Rochester, MN 55905 E-mail: schaid@mayo.edu Fax: (507) 284-9542 Mayo Foundation is an affirmative action and equal opportunity employer and educator.

#### PHARMACOKINETICS

The Department of Basic Pharmaceutical Sciences in the College of Pharmacy at the University of South Carolina invites applications for a tenure-track posi tion at the level of ASSISTANT or ASSOCIATE PROFESSOR to start preferably by October 1, 2000. A Ph.D. degree in pharmaceutical sciences is required. Postdoctoral experience in pharmacology, biochemistry, molecular biology, or gene therapy, etc., is desirable but not required. Applicants must possess excellent communicative and interpersonal skills and be willing to collaborate with other faculty in multidisciplinary research projects in the areas of medicinal chemistry, pharmacology, and pharmaceutics. The applicant will be expected to develop an independently funded research program and to participate in the teaching of pharmacokinetics to professional and graduate pharmacy students. Send curriculum vitae, a statement of research objectives, and the names and addresses of three references by June 1, 2000, to: Dr. Joseph W. Kosh, Chair, Department of Basic Pharmaceutical Sciences, University of South Carolina, College of Pharmacy, Columbia, SC 29208. See website: http://www.cop.sc.edu for additional information regarding the Department and the College. The University of South Carolina is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

#### MOLECULAR MICROBIOLOGY UNIVERSITY OF TENNESSEE-KNOXVILLE

The Department of Microbiology (website: http://www.bio.utk.edu/microbio.nsf) seeks to fill an academic position at the rank of ASSISTANT PROFESSOR (tenure track). Candidates must have a Ph.D. in microbiology or a related area, postdoctoral experience, and publications in reviewed journals of excellent quality. They must also have interest in teaching at the graduate level in their area of expertise and at the undergraduate level in microbial physiology and molecular biology. Candidates must have the capacity to establish a research program in molecular microbiology, fundable at the national level. Applicants should send a letter of interest accompanied by curriculum vitae, bibliography, statement of research and teaching interests, and names and addresses of three references to: Dr. Gary Stacey, Chairman, Search Committee, University of Tennessee, Department of Microbiology, M409 Walters Life Science Building, Knoxville, TN 37996-0845. Evaluation of applicants will begin on June 1, 2000, and continue until the position is filled. University of Tennessee-Knoxville is an Equal Employment Opportunity/ Affirmative Action/Title VI/Title IX/Section 504/Americans With Disabilities Act/Age Discrimination in Employment Act Institution in the provision of its education and employment programs and services.

#### MOLECULAR NEUROBIOLOGIST

The Neurobiology group within the Robert Stone Dow Neurobiology Laboratories in Portland, Oregon, is seeking a well-qualified Molecular Neurobiologist for the position of ASSISTANT or ASSOCI-ATE SCIENTIST. We are particularly interested in individuals with at least two years of experience in a range of molecular biology applications. The candi-date should have a Ph.D. or M.D. degree and preferably a strong background in techniques including cDNA cloning, gene transfection, and expression in vitro and immunoprecipitation. The candidate will be joining an established group working on intracellular pathways mediating neuronal death in a range of in vitro and in vivo model of ischemia. The Neurobiology Laboratories are contained within a newly remodeled 6,000 square foot facility and offer an ideal scientific environment. Please send curriculum vitae and the names of three references to:

Roger P. Simon, M.D. Robert S. Dow Chair of Neurology Director, Neurobiology Research Legacy Clinical Research and Technology Center 1225 N.E. Second Avenue Portland, OR 97232 POSITIONS OPEN



#### PONCE SCHOOL OF MEDICINE

New Faculty Positions. Ponce School of Medicine (PSM) is a LCME-accredited private institution in the historical and beautiful Caribbean coastal city of Ponce, Puerto Rice. PSM is committed to develop as an academic research center of the Caribbean, focusing on regionally important biomedical issues. We are seeking candidates for the following: (1) A Chair of the Department of Physiology. This Department has a productive group of young faculty members with diverse research interests. We seek a dynamic Investigator/Educator who has an active research program and is willing to devote time to the administration of the Department. A molecular approach to research in cardiovascular or renal physiology is preferred, but candidates will be considered on the strength of their curriculum vitae. Academic rank at **PROFESSOR** or ASSOCIATE PROFESSOR level depending on qualifications. (2) A Ph.D. Molecular Biologist/Virologist in AIDS research with established research program to lead a sophisticated technical team in PCR, gene cloning, and sequencing. Academic rank is open depending on qualifications. (3) An M.D./ Ph.D. interested in diabetes mellitus or in other cardiovascular diseases who is capable of obtaining funding. Must have a strong publication record and clear research goals. Rank is open, but ASSOCIATE **PROFESSOR** level is preferred. (4) A systems or behavioral neuroscientist, Ph.D., with interest in emotion or cognitive research and with clearly focused research interest, yet able to collaborate with investigator in other disciplines. All faculty positions carry a maximum teaching time responsibility of 25%. Written and verbal knowledge of Spanish is not nec-essary but would be helpful. Please address your applications (curriculum vitae plus three reference letters) and inquiries to: Manuel Martínez Maldonado, M.D., President and Dean, Ponce School of Medicine, P.O. Box 7004, Ponce, PR 00732. Email: martinem\_pms@hotmail.com.

The Biology Department of the University of Puerto Rico, Cayey Campus, seeks applicants for full-time, tenure- and nontenure-track (as indicated below) AS-SISTANT PROFESSOR positions to begin August 2000 for the 2000-2001 academic year. Responsibilities include teaching undergraduate introductory and advanced courses in various specialties in all areas of the biological sciences (nontenure track), including anatomy and physiology (tenure track), plant physiology (tenure track), and evolutionary vertebrate zoology (tenure track). Doctorate and a strong commitment to excellence in teaching and involvement of students in research are required. Applicants must be bilingual, fluent in Spanish and English. Submit curriculum vitae, official transcripts (undergraduate and graduate), statement of teaching philosophy and research interests, and three letters of recommendation to: Chairperson, Biology Department, Cayey University College, Cayey, PR 00736. Telephone: 787-738-2161, ext. 2036; FAX: 787-263-6426; e-mail: SC\_SEARCH@CAYEY1.UPR.CLU.EDU. Applicants accepted until all positions are filled. University of Puerto Rico is an Equal Opportunity Employer.

**POSTDOCTORAL POSITION** is available for the use of a novel gene therapy vector in animal studies and for the development of a bioartificial liver in collaboration with Lawrence Livermore National Laboratory. Candidates must have a Ph.D. degree with a strong background in molecular biology and virology. Applicants should send curriculum vitae and virology. Applicants should send curriculum vitae and names of references to: Dr. Mark Zern, University of California Davis Medical Center, Transplant Research Institute, 4635 Second Avenue, Room 1001, Sacramento, CA 95817. E-mail: mazern@ ucdavis.edu.

#### POSITIONS OPEN

POSTDOCTORAL POSITION in microbial pathogenesis available to investigate heme acquisition systems used by Haemophilus influenzae. Emphasis will be placed on identification and characterization of H. influenzae outer membrane proteins, which interact directly with human heme carrier proteins and on H. influenzae gene products involved in the regulation of expression of these proteins. Experience with recombinant DNA techniques is required; this project makes extensive use of mutant analysis in conjunction with a relevant animal model. Position includes salary, fringe benefits, and the opportunity to work in a dynamic research environment. Position available after June 1, 2000. Send curriculum vitae and the names and telephone number of three references to: Dr. Eric J. Hansen, Department of Microbiology, The University of Texas Southwestern Medical Center at Dallas, 5323 Harry Hines Boulevard, Dallas, TX 75390-9048. FAX: 214-648-5905. E-mail: hansen01@utsw.swmed.edu. University of Texas Southwestern is an Equal Opportunity/Affirmative Action Employer.

#### ASSISTANT PROFESSOR (RESEARCH)

The University of Louisville Center for Genetics and Molecular Medicine is seeking an Assistant Professor (research) to direct the Nucleic Acids core facility. The core currently provides DNA sequencing and genotyping and is expanding to the production and analysis of DNA microarrays. In addition to management, the Director is responsible for protocol development and training in novel nucleic acids-based technologies. The qualified candidate should have a Ph.D., excellent interpersonal and communications skills, extensive experience in molecular biology, and competence with computers. Experience with bioinformatics is an advantage. Applicants should send a letter outlining their interest together with their curriculum vitae by May 15, 2000, to: Center for Genetics and Molecular Medicine, University of Louisville Health Science Center, Room 1319, Research Tower, Louisville, KY 40292. An Equal Opportunity/Affirmative Action Employer.

**RESEARCH ASSOCIATES**: Advanced Viral Research Corporation (ADVR), a leader in the development of peptide nucleic acids, is seeking scientific personnel to staff its expanding basic research and quality assurance/quality control laboratories in Westchester County, New York. Candidates should have B.S./M.S. degrees and knowledge of research techniques in chemistry, biochemistry, virology, and/ or immunology. We offer competitive compensation and benefits packages. Please submit curriculum vitae to: Human Resources Department, Advanced Viral Research Corporation, 200 Corporate Boule vard South, Yonkers, NY 10701. FAX: 914-376-7368. ADVR is an Equal Opportunity Employer.

**POSTDOCTORAL POSITION** available immediately to study regulation of bile acid transport and apoptosis in hepatocytes. Applicants should have a Ph.D., D.V.M., or equivalent and experience in cell/ molecular biology techniques. Experience in transport studies, protein phosphorylation/translocation, and transfection studies is desirable. Send or c-mail letter of interest, curriculum vitae, and names of three references to: Dr. Sawkat Anwer, Professor and Chair, Department of Biomedical Sciences, Tufts University School of Veterinary Medicine, North Grafton, MA 01536. E-mail: sanwer@infonet. tufts.edu.

#### FIELD STATION DIRECTOR

The Rocky Mountain Biological Laboratory seeks a full-time Director starting October 1, 2000. RMB1. is an independent field station supporting research and education. Responsibilities include administration of operations, development, scientific leadership, and public liaison. Further information at website: www. rmbl.org. Send curriculum vitae, self-statement, and three reference letters by May 31, 2000, to: Search Committee, RMBL, P.O. Box 519, Crested Butte, CO 81224.



Fort Dodge Animal Health is one of the world's leading manufacturers of veterinary pharmaceuticals and biologicals. With superior production facilities headquartered in Fort Dodge, lowa, we bring talented people and state-

of-the-art technology together with a corporate and personal commitment to leadership in science that will benefit animal health care and people all over the world. And, because we are a part of American Home Products Corporation, we occupy a unique position of strength and opportunity within the industry.

## SENIOR MANAGER IN VIRAL PROCESS DEVELOPMENT

The ideal candidate will manage the production of immunogenicity and prelicensing serials, build production models and determine cost of goods, and design and direct various studies. You will also develop, optimize, scale-up and validate viral processes, and design and direct studies aimed at troubleshooting production process problems. COG reduction, and process improvement for licensed products. Other responsibilities include the development of timelines, maintaining date tracking systems, and coordinating resources, protocols and batch records for licensed and new products in development. Interacting with other departments and other manufacturing sites and assisting in other departmental duties are also required.

Qualifications include a Ph.D. in a biological science with one year related industry experience, or a Master's/Bachelor's degree in an appropriate discipline with five years of related experience. Experience in cell culture, virus propagation and downstream processing is a must. Previous supervisory experience and strong analytical and communication skills are required.

In return for your expertise, we offer a competitive compensation package including a company sponsored pension and 401(k) plan. For consideration please send resume and cover letter to:

Fort Dodge Animal Health Human Resources Reference #: 019020400 PO Box 518 Fort Dodge, IA 50501

#### EOE M/F/D/V

Pre-employment physical and drug screening required.





**W A CODENTIAL GLOBAL FORCE.** A cogent synergy of science, technology and commercial minds focused on one thing—controlling disease. Our broad expertise with vaccines, blood testing and therapeutics enables us to target cancer, cardiovascular and infectious diseases and create powerful new opportunities for the future. Currently, we seek talented individuals to join us at our convenient East San Francisco Bay location in Emeryville, California.

#### **Research Associate**

As a member of a rapidly growing bio-analytical group, you will process biological samples and run them on sophisticated LC/MS/MS equipment. You will also be responsible for analyzing the data and generating electronic reports. Your qualifications must include a BS in Chemistry or a related field and 2+ years relevant experience or an MS and one year relevant experience. You must have proven experience running LC/MS/MS and be familiar with standard data analysis programs as well as Excel. A high level of organization and demonstrated ability to work in a rewarding but very time-sensitive position are also necessary. Job Code 4259

#### Scientist, Analytical Computational Chemistry

As a member of a leading-edge analytical group, you will be responsible for the creation and implementation of efficient algorithms for the in-depth analysis of small molecule and peptide mass spectrometry data for protein structure modeling using experimental constraints. This job requires a PhD in Computational Chemistry or a closely related field. Proven ability to analyze complex data sets is a must. As this is a very interdisciplinary group, excellent communication skills are a necessity. Job Code 3868

To join our global team, send your resume with salary requirements, indicating appropriate Job Code, to: Chiron Corporation, Human Resources, 4560 Horton Street, Emeryville, CA 94608. Or email to jobs@cc.chiron.com. As an equal opportunity employer, Chiron honors diversity in every respect. www.chiron.com

## CHIRON

#### **IOWA STATE UNIVERSITY**

#### Professor and Head, Department of Agronomy

The vision of the Department is to continue to strive for excellence in agronomic teaching, research, and outreach by implementing creative programs that are nationally and internationally recognized. The Department's ability to realize its vision has been greatly enhanced by the creation of an \$80M endowment and the establishment of a university-wide Plant Science Institute. The Department has 255 faculty and staff, 354 students on-campus and 40 students enrolled in the off-campus M.S. program.

The Department Head is expected to provide visionary leadership and fiscally responsible guidance for teaching, research, and extension programs and to: (i) establish professional development programs for faculty and staff; (ii) facilitate communication among faculty, staff, students, citizens of Iowa, and agricultural leaders at national and international levels, (iii) encourage interdisciplinary and interstate programs, and an environment conducive to quality interactions among faculty and staff for teaching, research, and extension projects; (iv) promote communication between departmental personnel, decision-makers, agencies, and industry; and (v) promote diversity in the faculty, staff, and students through recruitment of minorities and women.

Applicant must have an earned doctorate in a relevant scientific field. Applicant must possess excellent communication skills, demonstrated leadership ability, internationally recognized record of strong scholarship, qualify for tenure at the rank of professor in the department. Administrative training and experience is preferred. Salary will be commensurate with qualifications and experience.

Applications should include curriculum vitae, names of five references, statement addressing the candidate's administrative philosophy, and ability to work with and provide effective leadership to a large and diverse department. Confidential inquiries and nominations are welcome. Full-time administrative position with a 12-month continuing appointment in the College of Agriculture, Agriculture & Home Economics Experiment Station, and Cooperative Extension, subject to five-year review. Send applications and nominations to: Dr. J. Michael Kelly, Chair, Agronomy DEO Search Committee, 253 Bessey Hall, Iowa State University, Ames IA 50011-1021, Telephone: (515) 294-1166, Fax: (515) 294-2995, email: jmkelly@iastate.edu.

Application materials are due by **June 1, 2000**; however, applications will be considered until position is filled. Additional information on the Department is available at www.agron.iastate.edu.

Iowa State University is an Affirmative Action/Equal Opportunity Employer.

#### ASSISTANT 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 Human Cancer Genetics Program is rapidly expanding under the leadership of Dr. Albert de la Chapelle, and The Ohio State University campus includes an NIH-funded Comprehensive Cancer Center and colleges with comprehensive undergraduate and graduate programs. Applications should include a detailed curriculum vitae, a description of research experience, and a statement of planned research. Further detailed curriculum vitae, a description of research experience, and a statement of planned research. Further information can be obtained at websites: 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.

#### ASSISTANT PROFESSOR OF INSECT PHYSIOLOGY/BIOCHEMISTRY

Cornell University/New York State Agricultural Experiment Station, Geneva, New York. Interested candidates are asked to apply for this 12-month tenure-track position (100% research) to develop a nationally recognized research program focusing on physiological or biochemical interactions between insects and their host plants. Must establish an innovative research program on discovery and characterization of gene products of potential relevance to the control of insect pests and/or their resistance to current pest control practices. Creative and novel approaches to the research on insect/plant interactions will depend upon molecular and biochemical approaches, including structural and functional genomics. A Ph.D. in a biological science with training and experience in entomology is required. Submit résumé, transcripts, statement of research interests, copies of pertinent publications, and names and addresses of three references to: Dr. Michael Villani, Chair, Search Committee, Cornell University/NYSAES, Department of Entomology, Barton Laboratory, Geneva, NY 14456. Further information may be viewed at website: http://www.nysaes.cornell. edu/ent.

A POSTDOCTORAL POSITION is available in an NIH-funded project to study the molecular and electrophysiological mechanisms of angiotensin II regulation of neurotransmission in the brain. Experience with whole-cell and single-channel patch clamp techniques is essential. An understanding of molecular and biochemical techniques in G-protein coupled receptor research is desirable. Salary is negotiable based on experience. Starting date: as soon as possible. Please send curriculum vitae to: Drs. Mohan K. Raizada (e-mail: mraizada@phys.med.ufl.edu) or Craig H. Gelband (e-mail: gelband@phys.med.ufl. edu), Department of Physiology, University of Florida College of Medicine, P.O. Box 100274, Gainesville, FL 32610. The University of Florida is an Equal Employment Opportunity/Affirmative Action Employer.

**POSTDOCTORAL POSITION** on NIH campus in Bethesda, Maryland, to develop and apply new molecular methods to discover viruses. Experience with virology and molecular techniques required. Send or e-mail: krause@cber.fda.gov curriculum vitae and names of three references to: Philip Krause, M.D., FDA/CBER, HFM-457, 1401 Rockville Pike, Rockville, MD 20852.

#### POSITIONS OPEN

HARVARD SCHOOL OF PUBLIC HEALTH

Department of Environmental Health Environmental Science and Engineering Program

#### ASSISTANT PROFESSOR HARVARD SCHOOL OF PUBLIC HEALTH

The Departments of Environmental Health and Health Policy and Management invite applications for Assistant Professor of Environmental Health Risk Assessment. Ph.D. or Sc.D. and postdoctoral experience required, with demonstrated competence in areas related to environmental system analysis such as environmental economics, biostatistics, environmental engineering, and modeling of energy and contaminant flow including transport, fate, and risk assessment. A working knowledge of quantitative analysis of health, ecologic, and economic consequences of material and energy use is essential. Will be expected to teach graduate students and postgraduates and to develop an independent research program that complements current research areas. Send a letter of current and future research interests, curriculum vitae, and the names of three references to

#### Chair, Search Committee Environmental Science and Engineering Program Harvard School of Public Health 665 Huntington Avenue, Room 1312 Boston, MA 02115

Minorities and women are especially encouraged to apply.

#### IMMUNOLOGY FACULTY POSITION DEPARTMENT OF PATHOLOGY University of California San Francisco

The Department of Pathology of the University of California San Francisco School of Medicine seeks an outstanding immunology researcher for a tenuretrack faculty position. Appointment may be made at the ASSISTANT, ASSOCIATE, or PROFESSOR level. The successful candidate will have an M.D. and/or Ph.D. degree, a record of excellence and innovation in laboratory research, and (for senior appointments) independent extramural funding. Open to investigators in any area of immunology, but preference may be given to those studying disease models and cellular interactions in normal and pathologic immune responses. Clinical duties are not obligatory but are an option for qualified applicants. The candidate will join the interdepartmental UCSF immunology graduate program and will be provided with newly renovated research space and a competitive start-up package

Applicants should send a curriculum vitae to:

#### Chair, Immunology Faculty Search Department of Pathology, Box 0506 University of California San Francisco, CA 94143

UCSF is an Affirmative Action/Equal Opportunity Employer. The University undertakes Affirmative Action to assure Equal Employment Opportunity for undentilized minorities and women, for persons with disabilities, and for Vietnam-era veterans and special disabled veterans.

#### STAFF SCIENTIST IN VIRAL PATHOGENESIS, IMMUNOLOGY, AND VACCINOLOGY

Virion Systems, Inc., a Maryland biotechnology company, seeks a Staff Scientist for ongoing research in respiratory virus pathogenesis, immunology, and vaccinology. Targeted pathogens include respiratory syncytial virus (RSV), influenza viruses, and adenoviruses. Candidate must have experience with rodent animal modeling and expertise in molecular immunology and/or molecular virology. Generous benefits package. Candidates should send curriculum vitae and cover letter including names of three references to: Dr. Gregory A. Prince, President and CEO, Virion Systems, Inc., 9610 Medical Center Drive, Suite 100, Rockville, MD 20850. E-mail: gprince@erols.com. Virion Systems, Inc., is an Equal Opportunity Employer.

#### POSITIONS OPEN

ASSOCIATE/PROFESSOR PROFESSORSHIP Saint Louis University Health Sciences Center Department of Pharmacological and Physiological Science

Saint Louis University, a Catholic Jesuit Institution dedicated to education, research, and health care, is seeking applicants for faculty positions in the Department of Pharmacological and Physiological Science at Saint Louis University School of Medicine. The positions are a tenure-track appointment at the Associate Professor or Professor level. We offer an environment rich in senior-level scientific experience, start-up funds, laboratory space, and a record of highly sucessful and continuing extramural research funding. Preference will be given but not restricted to individuals with demonstrated experience in the application of modern techniques in research of the nervous or endocrine systems. Interested persons should send curriculum vitae, three letters of reference, and a description of research interests and objectives to:

#### Dr. Thomas C. Westfall Professor and William Beaumont Chair Department of Pharmacological and Physiological Science Saint Louis University School of Medicine 1402 South Grand Boulevard St. Louis, MO 63104

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

#### ASSISTANT/ASSOCIATE PROFESSOR BIOMEDICAL SCIENCES

Ph.D. in medicinal chemistry, bioorganic chemistry, chemical toxicology, or a closely related field is required. At least two years of postdoctoral experi-ence, a strong publication record, and excellent communication skills are also required. For consideration at the Assistant level, the individual must be in a strong position to establish an externally funded research program. For the Associate-level appointment, existing multiyear funding is required. Individuals with professional pharmacy degree and prior teaching experience will be given preference and are encouraged to apply. The research area should broaden the existing expertise in the department and emphasize chemical approaches to study biological mechanisms. This is a tenure-track, academic-year position beginning in fall 2000. Further information about the department can be found at website: www.uri.edu/ pharmacy/departments/bms/index.html. Applicant review will begin in April and continue until the position is filled. Send curriculum vitae, copies of selected publications, a statement of research goals and teaching interests, and at least three reference letters to: Dr. Z. A. Shaikh, Search Committee Chair (Log # 161101SM), University of Rhode Island, P.O. Box G, Kingston, RI 02881. The University of Rhode Island is an Affirmative Action/Equal Employment Opportunity Employer and is strongly committed to achieving excellence through increased diversity of its faculty, staff, and students. Persons from underrepresented groups are encouraged to apply

#### MEDICAL ADVERTISING COPYWRITER

You love science but also need to earn a living. Here's a golden opportunity to do both. Robert A. Becker, one of the world's largest health care advertising agencies, is seeking a SCIENTIST with a flair for creative writing. The successful candidate will have an advanced degree in the life sciences and possess substantial creative ability. To show that you qualify, please send a résumé, a writing sample, and a speculative promotional writing assignment. Simply analyze any full-page, full-color ad in this issue of Science. Explain what you like and dislike about the ad, then write "your" version of the same ad. Send your résumé, writing sample, and assignment to: Writer Search, c/o Robert A. Becker, Inc., Euro RSCG, 1633 Broadway, New York, NY 10020. E-mail: dstevens@rabecker.com. For information, visit us at website: www.beckernet.com. Robert A. Becker is an Equal Opportunity Employer

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#### GROUP LEADER/SCIENTIST ES Cell Culture & Micro Injection

Overseeing the ES Cell and Micro Injection Core Facilities, you will provide expertise in ES cell culture, isolation, differentiation, and micro injection. We will rely on you to keep up to date on advances in the field and perform groundbreaking studies. To qualify, you must possess a PhD, 6-8 years hands-on experience in ES cell culture, differentiation, and blastocyst injection, and excellent written and oral communication skills. A strong desire to actively participate in a growing team is essential to your success in this highly collaborative role. Job # GS0823

#### ASSOCIATE SCIENTIST/SENIOR RESEARCH ASSOCIATE Molecular Biology

A highly motivated, results-oriented professional with strong molecular biology and biochemical expertise is needed to perform complex molecular biology experiments. Qualifications include a Master's/ PhD and 4-6 years experience in sophisticated molecular biology, as well as strong time management abilities. Job # GS0777

If you recognize these qualities in yourself, we want to hear from you. We offer competitive salaries, an outstanding benefits package, and significant opportunities for professional growth. Please mail/fax your resume with cover letter, indicating Job #, to Human Resources, Genome Systems, Inc., 4633 World Parkway Circle, St. Louis, MO 63134; fax 314/506-6429. No phone calls, please. An equal opportunity employer, M/F/V/D.

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## Mayo Clinic Smith Fellowships in Neurologic Disease Research

Through the gift of a generous benefactor, basic and clinical research fellowships to study neurologic disease with an emphasis on Alzheimer's diseases, Parkinson's disease, frontal temporal dementia and stroke, are available at Mayo Clinic in Jacksonville, Fla. These fellowship awards (\$40-50,000/yr) are available to applicants with a Ph.D., M.D., M.D.-Ph.D. degree or equivalent, and are designed to enable recipients to pursue their research interests under the guidance of an established mentor. The fellowships are targeted towards mature individuals with sufficient training that they may soon become independent investigators. In addition to these Smith Fellowships, a number of traditional postdoctoral positions are also available.

More detailed information on the Smith Fellowships, other postdoctoral positions and the individual research programs is available at www.mayo.edu/res-jax/jax\_res.html. Interested applicants should supply an updated version of their curriculum vita with their first e-mail or written contact. To apply, contact Pat Joy by e-mail at joy.patricia@mayo.edu or by surface mail: Attention: Smith Fellowships, Pat Joy, Birdsall Medical Research Building, Mayo Clinic, 4500 San Pablo Road, Jacksonville, FL, 32224. *Mayo Clinic is an affirmative action equal opportunity educator and employer*.

## the future



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#### PRINCIPAL RESEARCH SCIENTIST InVivo Pharmacology

Capitalizing on your scientific expertise, we will rely on you to provide leadership to our novel discovery programs in the genitourinary therapeutic area of our Neurobiology Business Unit. Specific responsibilities will include participating on project teams, directing a group of research associates, designing scientific studies, evaluating research results and making recommendations to management. Your PhD or equivalent in Pharmacology, Biological Sciences or Physiology must be accompanied by 6+ years of research experience in the pharmaceutical industry. This position requires a full command of physiology, neurology and anatomy and the proven application of these disciplines to model development in a pharma research setting. Proven experience in the areas of *in-vivo* model development, problem solving and project management is essential, as is experience managing a group of research associates.

Roche Bioscience is proud to offer competitive salaries and a full benefits package which includes relocation assistance, 401(k) and a pension plan. If you would like to explore our opportunities firsthand, apply today by sending your resume to Roche Bioscience, 3401 Hillview Avenue, A2-HR, Palo Alto, CA 94304. Fax (650) 424-8159. As an equal opportunity employer, we are committed to workforce diversity.

For further information regarding this opportunity and others, please visit our website at www.roche.com/bioscience

#### RESEARCH SCIENTIST U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL RESEARCH SERVICE Biosciences Research Laboratory Fargo, North Dakota

The USDA, Agricultural Research Service, Fargo, North Dakota, is seeking a **POSTDOCTORAL RE-SEARCH SCIENTIST** (GS-11/12; \$41,834 to \$65,179) in synthetic organic chemistry to synthesize radiolabeled ( $^{14}$ C or  $^{3}$ H) agricultural or environmental chemicals for use in metabolism studies or for structural identification of metabolites. The successful candidate will be expected to develop synthetic pathways or to adapt existing pathways to successfully incorporate the radioactive nuclides (<sup>14</sup>C or <sup>3</sup>H) into target molecules. Applicants must meet minimum education requirements as described in the vacancy announcement (Announcement Number RA-00-015L), which can be accessed at website: http:// www.ars.usda.gov/afm/hrd/hrdhomepage/ vacancy/pd962.html. Candidates with at least one year of research experience at the Doctoral level in synthetic organic chemistry and instrumentation (i.e., mass spectrometry, NMR, GLC, and HPLC) will receive the strongest consideration. Salary is commensurate with qualifications and experience. For information on application procedures, call Ms Melanie Nyquist, Administrative Officer; Telephone: 701-239-1203; for information on re-search project, call: Dr. Gerald L. Larsen, Research Leader, Animal Metabolism-Agricultural Chemicals Research Unit; Telephone: 701-239-1231. The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital and family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at Telephone: 202-720-2600 (voice or TDD). To file a complaint of discrimination, write: USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, S.W., Washington, DC 20250-9410. Telephone: 202-720-5964 (voice or TDD). USDA is an Equal Opportunity Provider and Employer.

#### BIOLOGIST OBERLIN COLLEGE

The Department of Biology at Oberlin College invites applications for a full-time, noncontinuing faculty position for the 2000-2001 academic year (ninemonth appointment). The incumbent will participate in a team-taught introductory organismal biology course for majors by teaching laboratory sections and performing related duties. The incumbent will also teach two courses (at least one of these including laboratory and/or field component) at the organismal or populations level that complement the existing Biology Department curriculum. Examples include ornithology, mammalogy, entomology, and animal behavior. One of these courses can be designed to include nonmajors as well as majors. Supervision of undergraduate research projects is desirable. Consideration will be given to applications for a one-semester appointment in the fall to teach introductory organismal biology and one additional course.

Among the qualifications required for the appointment is the Ph.D. (in hand or expected) by December 2000. Candidates must demonstrate interest and potential excellence in undergraduate teaching.

To be assured of consideration, letters of application including curriculum vitae, graduate transcript, and three letters of reference, should be sent to: Dr. Catherine A. McCormick, Chair, Department of Biology, Oberlin College, Oberlin, OH 44074, by April 20, 2000. Application materials received after that date may be considered until the position is filled.

Oberlin College has admitted women since its beginnings in 1833 and has been historically a leader in the education of African-Americans.

#### POSITIONS OPEN



The USDA, Agricultural Research Service, Plant Sciences Institute, Horticultural Crops Quality Laboratory, Beltsville, Marvland, is seeking a permanent full-time RESEARCH FOOD TECHNOLO-GIST/PLANT PHYSIOLOGIST, GS-12/13. Salary is commensurate with experience (\$51,204 to \$79,155 per vear) plus benefits. Must be U.S. citizen. Conducts food technology research to improve methods for maintaining microbial safety and quality of fresh-cut fruits and vegetables that are cut, sliced, or diced and then packaged for commercial and retail use without further preparation. Develops packaging technology and postharvest handling systems and implements strategies discovered from research on the interactions among human pathogens, plant pathogens, and their fruit and vegetable hosts to maintain microbial safety during preparation and marketing. Basic research includes elucidation of the regulatory mechanisms involved in plant senescence processes, including chlorophyll degradation, membrane changes, water loss, content of various volatile compounds, susceptibility to decay, and texture/flavor changes as these processes relate to quality and microbial safety. Appropriate qualifying education in food technology/plant physiology and/or professional research experience is required. For research program information, contact: Dr. Ken Gross; Telephone: 301-504-6128; e-mail: kgross@asrr.arsusda.gov. To address specific qualification requirements and application instructions, applicants MUST call Telephone: 301-504-1484 to request announcement ARS-DOE-0224 or via Internet at website: http://www.ars. usda.gov/afm/hrd/resjobs.htm. Applications must be postmarked by July 31, 2000. USDA/ARS is an Equal Opportunity Employer and Provider.

#### DEPARTMENT OF MEDICINE DIVISION OF INFECTIOUS DISEASE University of California, Irvine

The University of California, Irvine, College of Medicine, is seeking a SENIOR MEDICAL ACA-DEMICIAN as Chief of the Division of Infectious Disease in the Department of Medicine. This will be a tenured position. Qualified candidates must have either the M.D. or M.D./Ph.D. degree(s) and be internationally recognized for original research, with a solid track record of peer-reviewed funding. Responsibilities include development and oversight of quality educational clinical practice and research programs. Salary and rank are dependent upon experience. Interested candidates should send a copy of the curriculum vitae and a list of five references to: Alan G. Barbour, M.D., Professor, Department of Medicine, University of California, Irvine, College of Medicine, Medical Sciences L 3250, Irvine, CA 92697-4025. The University of California is an Equal Opportunity Employer committed to excellence through diversity.

#### EDITORIAL Director, Editorial

For company communicating scientific information to regulatory and health care professionals. Responsible for overall management of medical writing and project management operations, including training, evaluating, and supervising staff; medical and regulatory writing, editing and quality control; deadline management; cost containment; and client liaison. Requirements: Ph.D. in pharmacology, pharmacy, or related field. Four years of experience in job offered or four years of management experience. Experience must include writing and editing various types of medical communications and regulatory dossiers and supervising, training, and evaluation of staff. Must have knowledge of pharmacology, pharmacological principles and their application, therapeutics, clinical trial design, and regulatory submissions. Forty hours a week. Send résumé to: Box # 90, 1200 New York Avenue, N.W., Washington, DC 20005.

#### POSITIONS OPEN

South Orange County Community College Dis-trict, Department of Math, Science, and Engineering, has an opening for a full-time, nontenure **MARINE** SCIENCE/OCEANOGRAPH INSTRUCTOR at Saddleback College for the 2000-2001 academic year. Position is a one-year, temporary sabbatical leave replacement. Duties and responsibilities will be to instruct a variety of lecture/laboratory-division marine science/oceanography science courses, including introduction to oceanography, physical and chemical oceanography, and marine science; to assist in the development and implementation of a comprehensive oceanography/marine science curriculum; and to participate in general faulty functions related to the education program, in-service and professional development. Minimum qualifications: (1) Master's degree or higher in physical or chemical oceanography; OR (2) Bachelor's degree in any physical or marine science AND a Master's degree in physics, chemistry, or oceanography; OR (3) a combination of education and experience that is at least the equivalent of Items (1) or (2) above (candidates who apply on the basis of equivalency must submit the Supplemental Application for Equivalency Determination form in addition to all other required materials); OR (4) a valid California credential that authorizes service as a full-time community college instructor of marine sciences and oceanography. Preference will be given those candidates who demonstrate a high level of professional expertise on the basis of college teaching experience in oceanography and related areas. Current contract calls for 178 duty days per academic year. Salary: \$33,814 to \$52,412 commensurate with education and prior experience. Closing date: April 26, 2000. For an application, please contact: South Orange County Community College District, 28000 Marguerite Parkway, Mission Viejo, CA 92692. Job Line Telephone: 949-582-4850; FAX: 949-365-1748; website: www.socccd.cc.ca.us. Opening: #1711-2191.

#### ABBOTT LABORATORIES FELLOWSHIP IN DIABETES NORTHWESTERN UNIVERSITY

Research fellowships are available beginning July 1, 2000. This newly developed program is sponsored by the Division of Endocrinology, Metabolism, and Molecular Medicine at Northwestern University Medical School and the Diabetes and Obesity Research Group at Abbott Laboratories. Research interests of the training faculty include mechanisms of insulin action and resistance and genetic studies of diabetes. Fellows will work with one or more of a dozen primary mentors within the training program but interact broadly with scientists at both institutions. The successful candidate should have an M.D. or Ph.D. degree and a background relevant to these areas of research. Interested applicants should forward curriculum vitae and three letters of recommendation to:

#### William L. Lowe, Jr., M.D. Division of Endocrinology, Metabolism, and Molecular Medicine Tarry 15–703 Northwestern University Medical School 303 East Chicago Avenue Chicago, IL 60611

Alll information must be received by June 15, 2000. An Affirmative Action/Equal Opportunity Employer.

**RESEARCH ASSOCIATE** position available for one year to study the molecular mechanisms of axonal guidance. Position requires a Ph.D. or equivalent and extensive postdoctoral experience in both molecular biology and neural anatomy. The position requires *in sim* hybridization, neuron culture, and axon track tracing techniques. Salary is commensurate with experience, and a comprehensive benefits package is available. Please send curriculum vitae by April 24, 2000, to: Ms. Deborah Bachorik, Laboratory for Cancer Research, College of Pharmacy, Rutgers, The State University of New Jersey, 164 Frelinghuysen Road, Piscataway, NJ 08854-8020. FAX: 732-445-0687; e-mail: bachorik@rci.rutgers.edu. MDS Panlabs, a leading contract research services organization located on Seattle's eastside, provides R&D services to the pharmaceutical and biotechnology communities. MDS Panlabs Pre-Clinical Services Division has the following opening:

#### Molecular Pharmacology Scientist Biochemical Assay Development (Position #99-34)

Accountable for developing and validating molecular assays used by the pharmaceutical industry to profile new drug leads in a broad range of therapeutic areas. Responsibilities will include: Methods development and validation, measurements of radioligand binding, enzyme kinetics and inhibition, and cellular responses, development of standard operating procedures, and assess ment and prioritization of assay targets. Must be familiar with receptor pharmacology and signal transduction mechanisms. Position requires excellent written and oral communications skills, strong interpersonal skills, and an ability to act as a resource in technical consultations with and presentations to, pharmaceutical industry clients. A Ph.D in pharmacology, molecular biology, biochemistry, immunology, or related discipline with 24 years of postdoctoral experience is required. Skills in molecular biology are desirable.

MDS Panlabs is an equal opportunity employer. We offer competitive salary and benefit packages. Submit resume to:

> MDS Panlabs Attn: Human Resources #99-34 11804 North Creek Parkway South Bothell, WA 98011 FAX: (425) 487-3787 Email: employment@panlabs.com (Microsoft Word attachment)\_

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#### TOXICOLOGIST

We are seeking a Scientist with a minimum of 5 years experience and Ph.D. or DVM with formal training in toxicology.

This individual will be responsible for the design, implementation and analysis of GLP toxicology studies to support the regulatory filings of protein-based human parenteral drugs with the FDA and EMEA. The successful candidate will be familiar with GLP, FDA and ICH guidelines for drug licensure. Certification by American Board of Toxicology (ie. DABT) & experience in placing studies with contract laboratories are assets. Experience in performing toxicological studies with biologicals is preferred. Job Code: TOX/111

#### PHARMACOLOGIST

Reporting to the VP of Clinical Development, we seek a motivated team player to direct pharmacology studies in development & research programs, generate data, and develop in vivo models & in vitro assays to evaluate efficacy of novel molecules, with a focus in protein based therapeutics. In addition, individual will supervise pharmacology group & work with research groups on late stage research projects & also through transition to development. Qualified candidate must possess Ph.D., minimum 5 years industry experience in preclinical pharmacology & strong research experience & publication record. Strong background in inflammatory diseases & immunology a plus. Excellent written & oral communication skills are also essential. Job Code: NS/888

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REGENERON Pharmaceuticals, Inc. 777 Old Saw Mill River Road, Tarrytown, New York 10591 Fax: (914) 345-7790 e-mail text or PDF: jobs3@regpha.com EOE M/F/D/V Regeneron...we thrive on unique challenges. You'll thrive with us.

#### Postdoctoral Research Fellowships Signal Transduction Pathways that Regulate Neurotransmitter Secretion in *C. elegans*

**Biochemical investigation of a C. elegans G protein signaling network.** Qualified applicants for this position include individuals with expertise in the production and purification of recombinant proteins, especially G proteins or G protein pathway components, or individuals with expertise in heterotrimeric G protein pathway biochemistry. The individual will investigate interactions between various known and novel components of the signaling network.

Investigation of new components of a C. elegans G protein signaling network. Qualified applicants for this position include individuals with interest and expertise in G protein signaling pathways who would like to broaden their training to include model organism genetics, or individuals with experience in C. elegans genetics who would like to specialize in neuronal signal transduction pathways. The individual will clone and molecularly characterize genes that are likely to encode positive or negative regulators of neurotransmitter secretion, followed by genetic, pharmacological, immunocytochemical, and biochemical investigation of the new components.

<u>Miller et al. (In review)</u>. RIC-8 (Synembryn): a novel regulator of  $G_q \alpha$  signaling in the *C. elegans* nervous system. <u>Miller et al. (1999)</u>.  $G_0 \alpha$  and diacylglycerol kinase negatively regulate the  $G_q \alpha$  pathway in *C. elegans*. Neuron 24, 323-333 (see also accompanying preview in the journal issue).

The Department of Molecular and Cell Biology at OMRF is superbly equipped for molecular biology, biochemistry, imaging, and *C. elegans* research. There are now 3 *C. elegans* labs in the department plus a *C. elegans* Gene Knockout Center. In addition, OMRF has several new core facilities. Applicants will be candidates for the *OMRF Foundation Fellows Program*, which includes a competitive salary, moving expenses, and other benefits. Send curriculum vitae and names of 3 references to



Ken Miller, Ph.D., Program in Molecular and Cell Biology, Oklahoma Medical Research Foundation, 825 Northeast 13<sup>th</sup> St., Oklahoma City, OK 73104. Fax: (405) 271-3153. E-mail: millerk@omrf.ouhsc.edu. OMRF is an Affirmative Action/Equal Opportunity Employer



## Cardiovascular Bioelectricity Center Brigham and Women's Hospital Harvard Medical School

#### Instructor in Cellular Electrophysiology

A position is available immediately to study the assembly and trafficking of cardiac K<sup>+</sup> channels. Cellular electrophysiology training required. Recent publications describing on-going studies have appeared in J. Biol. Chem. (274:11487) and P.N.A.S. (95:2926).

#### Postdoctoral Fellowship

Postdoctoral positions are available for highly motivated individuals to study cardiac electrical remodelling using cDNA micro arrays, transgenic and knockout mice. Applicants must have a Ph.D. and/or M.D. degree as well as 0-3 years postdoctoral experience.

Please send a letter stating your research interest, a curriculum vitae and names and addresses of three references to: Gideon Koren, Brigham and Women's Hospital, 75 Francis Street, Thorn 1227A, Boston, MA 02115, E-mail: Koren@calvin.bwh.harvard.edu.

Affirmative Action/Equal Opportunity Employer

#### MICROBIOLOGIST

Baylor University, a private comprehensive university of 13,000 students, seeks a Microbiologist for a tenure-track position at the ASSISTANT PROFES-SOR level beginning fall 2000. Applicants must have a Ph.D. and use modern approaches to examine biological processes. Position responsibilities: (1) teach a course in bacteriology, (2) teach an introductory microbiology course for nursing majors, (3) establish a research program involving undergraduate and graduate students, (4) develop an upper-level course in your specialty to alternate with a basic course, and (5) participate in departmental and university service activities. Baylor is renowed for excellence in teaching balanced with quality faculty and student research. To ensure full consideration, a complete application should be received by June 5, 2000. Applications will be reviewed beginning June 6, 2000, and will be accepted until the position is filled. A complete application consists of: application letter, statements of teaching philosophy and research interests, curriculum vitae, graduate and undergraduate transcripts, and three reference letters. Send materials to: Dr. David Eldridge, Search Committee Chair, Department of Biology, Baylor University, Waco, TX 76798-7388. Telephone: 254-710-2911; FAX: 254-710-2969; e-mail: David\_Eldridge@baylor. edu; website: http://www.baylor.edu. Baylor University is a Bapist university affiliated with the Baptist General Convention of Texas. As an Affirmative Action/Equal Employment Opportunity Employer, Baylor encourages minorities, women, veterans, and persons with disabilities to apply

#### **RESEARCH SCIENTIST III**

The Metropolitan Water Reclamation District of Greater Chicago will be accepting applications for the position of Research Scientist III.

The successful candidate will have a Master's degree or a Ph.D. in water resource sciences, environmental engineering, sanitary engineering, or environmental sciences from an accredited college or university and six years of research experience or comparable graduate studies in wastewater and sludge treatment technology.

The salary range is \$67,527.20 to \$97,643.52. The District also offers an outstanding benefits package including medical, dental, pension plan, tuition reimbursement, and excellent career opportunities.

For an application or information on this position or other employment opportunities available at the District, please contact the:

Metropolitan Water Reclamation District of

Greater Chicago Public Service Office 100 East Erie Street Chicago, IL 60611 Telephone: 312-751-5100 FAX: 312-751-5073 Website: www.mwrdgc.dst.il.us E-mail: jobs@mwrdgc.dst.il.us

#### NATURAL PRODUCTS CHEMISTRY IMMUNOLOGY/MICROBIOLOGY

**POSTDOCTORAL POSITIONS** available to study prenyl pyrophosphate antigens (*Nature* 375:155; *Immunity* 3:495) and CD1-lipid antigens (*JEM* 191: 937) for human  $\gamma\delta$  T cells. Projects include the purification and identification of phosphoantigens and lipid antigens from bacteria, parasites, or tumors; assessment of the deoxyxylulose pathway for IPP synthesis in the generation of phosphoantigens; identification of the phosphoantigen-presenting protein; and studies on the cellular and molecular basis for recognition by  $\gamma\delta$  T cells. Applicants need a research background in natural products/organic chemistry, immunology, biochemistry, microbiology, or molecular biology. Email curriculum vitae and addresses of three references to: Craig T. Morita, M.D., Ph.D., Department of Internal Medicine, University of Iowa, EMRB 340F, Iowa City, IA 52242. FAX: 319-335-7607; E-mail: Craig-Morita@uiowa.edu.

#### POSITIONS OPEN

The Department of Pharmacology and Therapeutics at the Louisiana State University Health Sciences Center in Shreveport invites applications for a 12month, tenure-track faculty position as an ASSIST-ANT/ASSOCIATE PROFESSOR in pharmacology. The Health Sciences Center in Shreveport is the largest medical facility in the Tri-State area and places a high priority on professional training, with a tradition of excellence in medical and graduate student education, research, and service. The Department is recruiting qualified faculty members with expertise in any of the following areas: cell/molecular pharmacology or toxicology, neuropharmacology, neurotoxi-cology, cell/molecular neurobiology, or cell/molec-ular biology of signal transduction. The Department also maintains an NIH-funded training program for graduate and postgraduate training in alcohol and drug abuse research. The successful candidate must have a Ph.D. or equivalent degree in pharmacology or related discipline, with demonstrated research abilities and/or externally funded research in one or more of the above areas. As a faculty member, he/she will be involved in graduate and medical student teaching and will be expected to develop an independent and collaborative research program. Excellent facilities exist within the LSU Hospital and Medical School and the adjacent Biomedical Research Institute. The position is available immediately, and the review of applications will begin on April 30, 2000. Candidates should submit by mail a letter of application, curriculum vitae, and a detailed description of research abilities and plans, and arrange to have three letters of reference sent to:

Nick E. Goeders, Ph.D., Chair Pharmacology Search Committee Department of Pharmacology and Therapeutics LSU Health Sciences Center P.O. Box 33932 1501 Kings Highway Shreveport, LA 71130-3932 Telephone: 318-675-7852 FAX: 318-675-7857 E-mail: ngoede@lsumc.edu

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

Xenogen Corporation is a new, exciting biotech company in the San Francisco Bay area employing a patented technology to use bioluminescence to monitor infectious disease and cancer *in vitro* and in the living organism. We seek well-qualified individuals at the Ph.D. level for the following:

#### RESEARCH SCIENTIST CELL-BASED SENSOR GROUP

The successful candidate will play a role in our cellbased sensor group, which focuses on the construction of bioluminescent cell-based sensors for rapid identification of biological agents. A high level of expertise in microbial and molecular biology is required, including experience working with prokaryotic two-component signal transduction systems. Requirements include a Ph.D. plus a minimum of two years of postdoctoral work. A background in protein biochemistry and the ability to express engineered genes in a prokaryotic host are desirable, and industry experience is a plus.

#### RESEARCH SCIENTIST TRANSGENIC MOUSE GROUP (LPTA, Project Manager)

This Ph.D.-level position will work in our transgenic mouse program and focus on the development and use of these animals in drug discovery model systems using optical reporters. Expertise in molecular and cellular biology and gene cloning is essential, as well as experience with standard transgenic technology, gene replacement, and expression techniques. Industry experience is a plus.

For confidential consideration, mail or FAX your curriculum vitae to: Human Resources Department, Xenogen Corporation, 860 Atlantic Avenue, Alameda, CA 94501. FAX: 510-291-6196. Equal Opportunity Employer.

#### POSITIONS OPEN

#### CARDIOVASCULAR BIOLOGY AND DIABETES Washington University School of Medicine St. Louis, Missouri

The Department of Cell Biology (Philip D. Stahl, Ph.D., Chair) and the Center for Cardiovascular Research, Department of Medicine (Daniel P. Kelly, M.D., Director) invite applications for tenure-track faculty appointments at the level of ASSISTANT PROFESSOR. We seek Ph.D., M.D., or M.D./ Ph.D. candidates with research interests related to vascular cell biology, cardiac disease, or diabetes mellitus with emphasis on cell cycle, signal transduction, cell growth, metabolism, genetics, aging, and mitochondrial function. A generous start-up package is available. Please send curriculum vitae, a brief synopsis of research and future goals, and a list of three potential references to: Cardiovascular Biology Search Committee, Attention: Ms. Kelly Beaman, Washington University School of Medicine, Campus Box 8086, 660 South Euclid Avenue, St. Louis, MO 63110. E-mail: kbeaman@imgate.wustl.edu. Washington University is an Equal Opportunity/Affirmative Action Employer

#### BIOLOGY MEDIA EDUCATOR

Bored with benchwork? The DNA Learning Center, Cold Spring Harbor Laboratory, may have the job for you. We're looking for someone with a biology background to provide computer programming support for our Biomedia Department. We create online biology educational materials for high school students and the general public. So, candidates should be interested in Web-content development and be able to provide programming support in Perl, Javascript, and HTML. But wait, that's not all. The ideal candidate should also be capable and comfortable teaching the fundamentals of bioinformatics (using our Web tools) at workshops across the country. Check out our work at websites: http://vector.cshl.org; http://vector. cshl.org/dnaftb; http://vector.cshl.org/eugenics; and http://vector.cshl.org/bioservers. Interested parties should send a cover letter and curriculum vitae to e-mail: dnaftb@cshl.org.

#### RESEARCH ASSOCIATE

**POSTDOCTORAL POSITION** available for novel NIH-funded research on children's breathing disorders. Experience with protein chemistry, molecular biology, and writing papers will be required. Candidates must have Ph.D. Please send curriculum vitae to: Dr. Benjamin Gaston, University of Virginia Health System, Department of Pediatrics, P.O. Box 800386, Charlottesville, VA 22908. E-mail: bmg3@virginia.edu. The University of Virginia is an Equal Opportunity/Affinative Action Employer.

**POSTDOCTORAL POSITION** available to investigate mechanisms of very rapid enzymic reactions with emphasis on the physical biochemistry of proton transfer. Studies emphasize carbonic anhydrases and superoxide dismutases from many sources, including thermophiles (*Biochemistry* **38**:11686–11692, 1999; *Biochemistry* **37**:7649–7655, 1998). Current approaches include scanning stopped-flow spectrophotometry, mass spectrometry, pulse radiolysis, isotope effects, and magnetic resonance. A background in physical biochemistry is preferred. Send curriculum vitae and names of three references to: **Dr. David N. Silverman, College of Medicine, Box 100267, University of Florida, Gainesville, FL 32610-0267. Website: http://www.med.ufl.edu/pharm/facdata/silvermn/silvermn.html. University of Florida is an Affirmative Action/Equal Opportunity Employer.** 

#### POSTDOCTORAL POSITION UNIVERSITY OF CALIFORNIA SAN FRANCISCO

Postdoctoral position available to study GTPasedependent pathways regulating the cortical cytoskeleton. Projects include studies on integral membrane scaffolding proteins, actin-associated proteins, and integrin-associated proteins. Send curriculum vitae and three references to: D. Barber, Associate Professor, Biomedical Sciences Program, Box 0512, University of California, San Francisco, CA 94143. Email: barber@itsa.ucsf.edu.

ANNOUNCEMENTS



Keck Graduate Institute of Applied Life Sciences

#### Postdoctoral opportunity in Functional Genomics (FG-MB)

A postdoctoral research position in the areas of:

Signal transduction pathway mapping. Virus - host cell functional-interface mapping.

The laboratory is focused on translating basic science information into knowledge and tools for expediting drug discovery. The successful candidate will have a solid understanding of cell and molecular biology principles and gene profiling techniques, such as DNA microarrays. This project is part of a multidisciplinary research program involving cell/molecular and computational biologists. Therefore, commitment to a team-based research approach is essential.

Applicants should send a letter of interest, curriculum vitae, names and contact details of three references to: Human Resources, Keck Graduate Institute, 535 Watson Drive, Claremont, CA 91711 FAX: 909/607-8086

email: job\_applications@kgi.edu. Web site: http://www.kgi.edu. EOE

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### Postdoctoral Fellowship in New Drug Development



The Department of Clinical and Scientific Affairs (CSA), Plizer Gentral Research, New York City, announces its annual competition for a Postdoctoral Fellowship in New Drug Development.

This fellowship program is designed to provide diverse scientific training in the process of new drug development. The postdoctoral fellow will become a member of a pharmaceutical project team, and gain experience in clinical research. While no clinical studies are actually conducted at Plizer in New York, the fellow will interact with specialists in his/her chosen field to design, implement, and manage studies performed at universities, loopitals and with individual investigators.

One fellowship will be awarded for clinical research related to new drug development in one of the following areas: allergy, central nervous system, microbiology/ infections disease, urology, Candidates should possess a doctoral degree (e.g., PhD), have no more than one year of non-industry postdoctoral experience, and **be authorized to engage** *in employment in the US*. Some prior experience with clinical trials or the drug development process is desirable, but not a prerequisite. Salary will be determined based on qualifications and experience.

The Department of Clinical and Scientific Affairs has a broad range of activities. It is responsible for designing and conducting clinical development programs for Pfizer discovered compounds, as well as investigating and developing new claims and indications for marketed compounds. CSA also designs and conducts clinical development programs for new formulations and dosage forms of existing products.

Initial applications should include: 1) curriculum vitae containing education and training, research experience, awards, and a list of publications: 2) a statement describing research interests and experience, and how the proposed postdoctoral fellowship training relates to career goals: 3) one scientific reprint, which best describes the applicant's research results. The deadline for application is Friday, May 19, 2000.

Please submit applications to: Postdoetoral Fellowship in New Drug Development, Department of Clinical and Scientific Affairs, Pizer Gentral Research, 235 East 42nd Street, 4th Floor, mail stop 17, New York, NY 10017-5755; Attn: Mary Beth Erb, Director, Employee Resources, Pizer is an equal opportunity employer.

#### POSTDOCTORAL FELLOWSHIPS MOLECULAR PHARMACOLOGY MASSACHUSETTS GENERAL HOSPITAL

Research opportunities are available in three areas: (1) Nuclear membrane structure: Elucidation of a novel pathway localizing integral membrane proteins to the inner nuclear membrane and the formation of macromolecular signaling complexes in inner nuclear membrane lipid rafts. (2) Molecular enzymology: A multifaceted approach to identify the structural basis of substrate specificity and the biological role of two closely related enzyme isoforms. (3) Controls of myeloid cell-specific RNA splicing: Preference will be given to applicants familiar with techniques used to isolate and evaluate splicing factors or with the generation of conditional knockout mice. Applicants should submit their curriculum vitae and three references to:

Dr. Roy J. Soberman Massachusetts General Hospital East 149 The Navy Yard, 13th Street Room 8306 Charlestown, MA 02129 Telephone: 1-617-726-3747 FAX: 1-617-726-5651 E-mail: Soberman@helix.MGH.harvard.edu

POSTDOCTORAL FELLOWSHIP position available at Yale University School of Medicine starting July 1, 2000, to join a laboratory studying the signal transduction events in growth factor-mediated epithelial cell chemotaxis and tubulogenesis. Experience in protein assay and molecular biological techniques with background in cell biology and/or protein biochemistry preferred. Project involves examination of c-met receptor signaling in epithelial tubulogenesis, specifically determining the regulation of cellcell and cell-substrate interactions. Experimental procedures will include expression of tagged signaling protein constructs for real-time confocal imaging of protein-protein interactions. Please send curriculum vitae and three references to: Denise Krause, Associate Administrator, Yale University School of Medicine, Section of Nephrology, P.O. Box 208029, New Haven, CT 06520-8029. E-mail: lcantley@caregoup.harvard.edu. Yale University is an Equal Opportunity/Affirmative Action Employer. Women and members of minority groups are encouraged to apply.

#### POSTDOCTORAL POSITION AT EMORY ACE AND BLOOD PRESSURE CONTROL

An NIH-funded Postdoctoral position available to study the role of angiotensins converting enzyme (ACE) in blood pressure control and renal development. Mice with an ACE knockout present with an extremely low blood pressure, a developmental defect of the renal medulla, the inability to concentrate urine, and an abnormality of glucose handling (Lab. 74:953-965, 1996; JCI 99:2375-2385, Invest. 1997). The project will be to create and study mice made using homologous recombination that express ACE in selected tissues and in this fashion to investigate the origins of the ACE knockout phenotype. This is a wonderful project for someone interested in physiology or cell biology. Reply to: Ken Bernstein, Department of Pathology, Emory University, Atlanta, GA 30322. E-mail: kbernst@emory.edu. Emory is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOW/NONTENURE-TRACK ASSISTANT PROFESSOR to investigate retrograde signaling between pyramidal cells and inhibitory interneurons using electrophysiological and optical techniques on visualized cells in hippocampal slices. Intracellular recording experience preferred. Send curriculum vitae and names of three references to: B. E. Alger, University of Maryland School of Medicine, 655 West Baltimore Street, Baltimore, MD 21210. E-mail: balger@umaryland.edu.

#### POSITIONS OPEN

#### POSTDOCTORAL POSITION VASCULAR DEVELOPMENTAL BIOLOGY THE SCRIPPS RESEARCH INSTITUTE

Postdoctoral positions are available to study the molecular mechanisms underlying vasculogenesis and angiogenesis. Using "gene trap" screening in mouse ES cells, we identified an endothelial Zn finger gene, *Vezf1 (Dev. Dyn.* **212**:181; *Dev. Biol.* **206**:123). Candidates will study the role of Vezf1 during development and its involvement in signaling pathways by using a combination of biochemical, molecular, and genetic approaches.

Qualified candidates should have a strong background in molecular/developmental biology, a recent Ph.D. or M.D./Ph.D. degree, and U.S. *citizenship* or permanent residency. Submit curriculum vitae and names of three references to:

Heidi Stuhlmann Department of Vascular Biology, CVN–26 The Scripps Research Institute 10550 North Torrey Pines Road La Jolla, CA 92037 E-mail: hstuhlm@scripps.edu

TSRI is an Equal Opportunity/Affirmative Action Employer.

#### POSTDOCTORAL POSITION CANCER GENOMICS

A position is available to study rearrangements of genes involved in esophageal adenocarcinoma. We are using techniques that display large regions of the genome (including RecA protein-assisted reactions) or allow high-throughput analysis to pinpoint novel genes and determine the mechanism of rearrangement. Essential academic preparation: Ph.D. or M.D. with a background in molecular biology. Please submit your curriculum vitae and the names of three references to: Lance Ferring, M.D., Ph.D., Department of Medicine, University of Minnesota, Box 36, 420 Delaware Street, S.E., Minneapolis, MN 55455. Telephone: 612-626-0922; FAX: 612-625-5620; e-mail: ferri015@tc.umn.edu. The University of Minnesota is an Equal Opportunity Educator and Employer.

RESEARCH ASSISTANT/TECHNICIAN IN CELL BIOLOGY needed to study mechanisms of protein trafficking in yeast and cancer cells. Research background and B.S. or M.S. in biology, chemistry, or related field required. Salary commensurate with experience. Send résumé and names of three references to: Dr. William J. Chirico, Anatomy/ Cell Biology Department, SUNY-Health Science Center Brooklyn, 450 Clarkson Avenue, Box 5, Brooklyn, NY 11203. E-mail: wchirico@netmail. hscbklyn.edu.

A POSTDOCTORAL POSITION in protein crystallography is available to study interactions between plant antiviral proteins and HIV viral DNA for designing of antiviral agents. Crystals are available. Experience in crystallography is required. Send curriculum vitae and references to: Xiangpeng Kong, Skirball Institute, New York University School of Medicine, 540 First Avenue, New York, NY 10016. E-mail: kong@saturn.med.nyu.edu; FAX: 212-263-8951.

#### POSTDOCTORAL FELLOWS

Postdoctoral positions are available immediately to study regulation of genes involved in resistance to anticancer drugs and apoptosis, as well as novel mechanisms of resistance. Ph.D. and background in molecular biology and biochemistry are required. Send a curriculum vitae to: Ahmad R. Safa, Ph.D., Indiana University Cancer Center, 1044 Walnut, R4–119, Indianapolis, IN 46202. FAX: 317-274-8046.

#### POSITIONS OPEN

#### POSTDOCTORAL RESEARCH POSITIONS IN MICROBIOLOGY American Society for Microbiology/ National Center for Infectious Diseases

Positions are available for Postdoctoral Scientists to conduct novel research with the overall objective of developing practical applications of microbiology, immunology, and epidemiology for diagnosis and prevention of infectious diseases. Associates will perform research in residence at the National Center for Infectious Diseases, which is headquartered at the Centers for Diseases Control and Prevention in Atlanta, Georgia.

Deadline for applications is November 15, 2000. Website: http://www.asmusa.org/edusrc/edu23e. htm; e-mail: fellowships-careersinformation@asmusa. org. or ihulede@asmusa.org.

A POSTDOCTORAL POSITION is available immediately to study the intracellular signaling mechanisms related to lymphocyte activation and differentiation. Current projects aim at understanding several inhibitory signaling pathways for T cell activation (*Nature* 403:216, 2000). Experimental approaches include generating gene-targeted mouse models and subsequent analysis using various molecular and cellular biological techniques. Strong motivation in research and experience in molecular biology, immunology, and/or biochemistry are required. Send curriculum vitae and three recommendation letters to: Dr. Hua Gu, Laboratory of Immunology, National Institute of Allergy and Infectious Diseases, NIH, 12441 Parklawn Drive, Room 125, Rockville, MD 20852 U.S.A. E-mail: hgu@niaid.nih. gov. Closing date: April 28, 2000.

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#### LONG ISLAND JEWISH MEDICAL CENTER POSTDOCTORAL FELLOW RESEARCH SCIENTIST North Shore-LIJ Health System

Postdoctoral Fellow or Junior Research Scientist positions available. Exciting opportunity to join an expanding group studying the molecular function of the breast cancer susceptibility gene BRCA1. Candidates should have Ph.D. in molecular or cellular biology. Competitive salary commensurate with experience and qualifications. Send curriculum vitae to: Dr. Elliot M. Rosen, Department of Radiation Oncology, Long Island Jewish Medical Center, New Hyde Park, NY 11040. E-mail: erosen@lij.edu. LIJ is a teaching affiliate of the Albert Einstein College of Medicine. Equal Opportunity Employer; Minorities/Fenales/Disabled/Veterans.

**POSTDOCTORAL FELLOWSHIP:** molecular biology of Alzheimer's disease. Solid experience in molecular biology required. Work will involve utilizing laser capture microdissection, RNA amplification, array technology, and a variety of additional methods to analyze, validate, and expand on data from largescale arrays. The goal of the work will be to contribute to our understanding of the molecular cascade(s) leading to the neurobiological devastation of Alzheimer's disease. Opportunity for advancement exists. Funds available limited to U.S. citizens or permanent residents only. Send résumé, statement of research interests, and names of at least three references to: Paul D. Coleman, Ph.D., University of Rochester Medical Center, 601 Elmwood Avenue, Box 645, Rochester, NY 14642. E-mail: Paul\_Coleman@urmc. rochester.edu.

**POSTDOCTORAL RESEARCH POSITIONS** are available for Ph.D.s or M.D.s in the molecular biology and genetics of upper Gl and colon cancers, especially in transcriptional regulation of gene expression and transgenic mouse models. Experience in molecular biology is necessary. Work is in GI Division, Genetics and Cancer Center. Send curriculum vitae to: Anil K. Rustgi, M.D., Chief of GI Division, 600 CRB, University of Pennsylvania, 415 Curie Boulevard, Philadelphia, PA 19104-6140. E-mail: anil2@mail.med.upenn.edu; FAX: 215-573-2024. Equal Opportunity/Affinnative Action Employer.

#### ANNOUNCEMENTS

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- Must be a U.S. citizen or permanent resident.

#### For more details, contact:

Lester S. Gorelic, Ph.D., Cancer Training Branch, National Cancer Institute 301-496-8580 • 301-402-4472 (Fax) • lg2h@nih.gov http://rex.nci.nih.gov and click on "What's New."

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#### CONFERENCES

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Emotion, Cognition, and the Human Brain Antonio Damasio (Chair), John Allman, Eric Kandel, Patricia Kuhl

Future Directions for the Social Sciences Jerome Kagan (Chair), Richard Davidson, Michael Posner, Richard Shweder

Science, Culture, Meaning, and Values: A Dialogue Anne Harrington (Chair), Terrence Deacon, Stephen Kosslyn, Elaine Scarry

Science in the Liberal Arts Curriculum Rodney Nichols (Chair), Leon Lederman, Thomas Tritton

To receive program and registration details contact:



Science and Technology Meetings New York Academy of Sciences 2 East 63rd Street, New York, NY 10021 T: 212.838.0230, x324; F: 212.838.5640 Email: conference@nyas.org Website: http://www.nyas.org

POSTDOCTORAL POSITION to study central nervous system regulation of cardiovascular function with emphasis on effects of ovarian hormones. Ph.D. degree in biomedical science field with demonstrated expertise in molecular biology required. Current projects evaluate (1) receptor expression in cardiovascularly relevant CNS sites and (2) brainstem pathways modulating efferent sympathetic nerve activity. Training opportunities in neurohumoral control of the circulation at the Dalton Cardiovascular Research Center are excellent. Salary negotiable and commensurate with experience. Start date after May 2000. Contact: Dr. Cheryl M. Heesch, University of Missouri, Dalton Cardiovascular Research Center, Research Park, Columbia, MO 65211. Telephone: 573-882-2359; FAX: 573-884-4232; e-mail: heeschc@ missouri.edu.

POSTDOCTORAL RESEARCH POSITIONS in behavior, neuroimaging, and molecular genetics. One position will focus on primate social behavior and neuroanatomical correlates assessed by magnetic resonance imaging. MRI training is not required for those with strong computer skills. Observational research skills are essential. The second position will focus on steroid hormone receptor gene expression in transfected cell cultures and brain. Molecular genetic and tissue culturing skills are required. Positions available immediately to qualified candidates with a Ph.D. or M.D./Ph.D. degree. Send letter of interest, curriculum vitae, and e-mail addresses for three references to: David Lyons, Ph.D., Department of Psychiatry, Stanford University Medical Center, Stanford, CA94305-5485.E-mail: dmlyons@stanford. edu. Stanford University is an Equal Opportunity Employer.

#### POSITIONS AT GENOMICS FACILITY

Fungal Genomics Laboratory at North Carolina State University has immediate openings for **POST-DOCTORALS** (six), **GRADUATE ASSISTANTS** (four), **RESEARCH TECHNICIANS** (five), **DATA SYSTEMS MANAGER** (one). Personnel will conduct structural and functional genomics research on economically important filamentous fungi. For more information, visit website: www.cals. ncsu.edu/fungal\_genomics. Submit curriculum vitae, transcripts, and names of references to: Dr. Ralph A. Dean, Director, Fungal Genomics, North Carolina State University, 840 Main Campus Drive, Raleigh, NC 27606. E-mail: thomas\_mitchell@ ncsu.edu. NCSU is an Equal Opportunity/Affirmative Action Employer.

The University of Pittsburgh School of Medicine, Ophthalmology, and Visual Sciences Research Center has multiple positions available at the **POSTDOC-TORAL FELLOW/RESEARCH ASSOCIATE** (Ph.D./M.D.) level to work in each of the following areas: virology, cell biology, and immunology. Positions are available in the laboratories of **Dr. Paul R. Kinchington** (molecular biology of herpes viruses), **Dr. Nirmala SundarRaj** (corneal cell biology), and **Dr. Robert L. Hendricks** (viral immunology). Interested applicants should send curriculum vitae and names of three references to: Ms. Judith Smith, Department of Ophthalmology, Eye and Ear Institute, 203 Lothrop Street, Pittsburgh, PA 15213-2588. The University of Pittsburgh is an Affinative Action/ Equal Opportunity Employer.

#### POSTDOCTORAL POSITIONS WAKE FOREST UNIVERSITY

Positions are open to study the interaction of sickle cell hemoglobin and nitric oxide using spectroscopic tools. See Biophys. Chem. 84:1-11, 2000; Biochem. Biophys. Acta. 1428:381-387, 1999. Applicants should hold a Ph.D. in biochemistry, biophysics, or a related field. The appointment will be for two years with possible renewal. Salary will be set at \$27,000 to \$30,000. Send or e-mail curriculum vitae and contact information for three references to: Dr. Bruce King, Department of Chemistry, Wake Forest University, Winston-Salem, NC 27109. E-mail: kingsb@ wfu.edu. Equal Opportunity Employer/Affirmative Action.

#### POSITIONS OPEN

#### POSTDOCTORAL POSITIONS RNA PROCESSING AND STABILITY IN TRYPANOSOMES

Postdoctoral positions available to study posttranscriptional regulation of gene expression in the mitochondria of *Trypanosoma brucei*. Our laboratory is interested in (1) the role(s) of RNA binding proteins in regulating mitochondrial gene expression, particularly RNA editing (e.g., see *JBC* 274:12067–12074); and (2) regulation of RNA stability in *T. brucei* mitochondria (see *MCB* 20:2308). The latter project will explore the mechanism and machinery involved in a recently discovered UTP- and poly(A) tail-dependent RNA turnover pathway. A background in biochemistry and/or molecular biology is necessary. Please sencurriculum vitae and three letters of reference to: Dr. Laurie K. Read, Department of Microbiology, 138 Farber Hall, State University of New York at Buffalo, School of Medicine and Biomedical Sciences, Buffalo, NY 14214. E-mail: LREAD@acsu. buffalo.edu.

#### POSTDOCTORAL FELLOWSHIP RNA PROCESSING

A Postdoctoral Fellowship is available at the Yale School of Medicine in the laboratory of Susan Baserga, M.D., Ph.D., to study RNA processing in the yeast S. cerevisiae. Our research focuses on the RNA-protein and protein-protein complexes that process the precursors to the ribosomal RNAs (Mol. Cell. Biol. 19:5441, 1999; RNA 5:1597, 1999; J. Biol. Chem., in press). Candidates should hold a Ph.D., but prior experience in yeast genetics is not necessary. Applicants must be U.S. citizens or permanent residents. Curriculum vitae with names of three references may be sent to: Susan Baserga, M.D., Ph.D., Yale School of Medicine, Department of Therapeutic Radiology, Hunter 317, P.O. Box 208040, New Haven, CT 06520-8040. E-mail: susan.baserga@yale.edu.

**POSTDOCTORAL POSITION** available in computational protein science. Use and extend methods that combine continuum electrostatics and molecular mechanics to investigate the structural basis of protein function. Reactions studied emphasis electron and proton transfers and processes in integral membrane proteins. Position funded by N.S.F. PECASE award. Contact: Marilyn Gunner, Physics Department, City College of New York, CUNY. Telephone: 212-650-5557; e-mail: gunner@sci.ccny. cuny.edu. An Affirmative Action/Equal Employment Opportunity Employer.

**POSTDOCTORAL POSITION** available to study the interaction of the Lyme disease agent, Borrelia burgdorferi, with mammalian integrins. Ph.D., M.D./Ph.D., or D.V.M./Ph.D. required. Must be U.S. citizen or permanent resident; must be graduate of U.S. Ph.D. program. Send curriculum vitae and summary of research experience and have three reference letters sent to: Jenifer Coburn, Ph.D., Division of Rheumatology, Tufts-New England Medical Center, Box 406, 750 Washington Street, Boston, MA 02111. Equal Opportunity Employer.

POSTDOCTORAL POSITION, Harvard Medical School: NIH-supported position available immediately to study the cell biology of G proteins. Successful applicant must be eligible for training grant support and should have a background in molecular biology and biochemistry. Send curriculum vitae to: Dr. Bradley Denker, Harvard Institutes of Medicine, Brigham and Women's Hospital, 77 Avenue Louis Pasteur, Boston, MA 02115. Telephone: 617-525-5809; FAX: 617-525-5830; e-mail: bdenker@rics.bwh.harvard.edu.

**POSTDOCTORAL POSITION** available to study cardiac transcriptional regulation and cardiac development. We utilize molecular techniques, including transgenic mouse models and knockouts, to investigate diseases causing pathways. Contact: Jeffery D. Molkentin, Ph.D., Children's Hospital Medical Center, Division of Molecular Cardiovascular Biology, 3333 Burnet Avenue, Cincinnati, OH 45229-3039. FAX: 513-636-5958.

#### POSITIONS OPEN

#### POSTDOCTORAL POSITIONS

Plant, Community, and/or Ecosystem Ecologist and/or Biogeochemist to Work in Urban Ecosystems

We announce three Postdoctoral positions in ecol ogy as part of a long-term study of an urban ecosystem in the Southwestern United States, the Central Arizona-Phoenix LTER (website: http://caplter.asu. edu). Applicants should have interests and experience in interdisciplinary studies of urban or other human dominated ecosystems. Applications from any field of ecology are welcome, but preference will be given to invertebrate community ecology, plant ecology, and ecosystem- or landscape-level energetics or nutrient cycling. In addition, skills in soil biogeochemistry, hydrology, landscape ecology, modeling, or remote sensing would be highly valued. Position begins after April 30, 2000. Send cover letter explaining interest in the position and relevant expertise, curriculum vitae, phone numbers and e-mail addresses of three references, and reprints (no more than three) to: Brenda Shears, Postdoctoral Search, Center for Environmental Studies, Box 873211, Arizona State University, Tempe, AZ 85287-3211. Appli-cations due April 30, 2000, and the 15th and 30th of each month thereafter until filled. For inquiries, job description, and required and desired qualifications, contact: Brenda Shears; Telephone: 480-965-0870, e-mail: brenda.shears@asu.edu Position contingent upon funding. Affirmative Action/Equal Opportunity Employer.

#### POSTDOCTORAL RESEARCH ASSOCIATE

The Medical Department at Brookhaven National Laboratory currently has an opening under the direction of **S**. **J**. **Gatley** for a Research Associate. Applicants must have a Ph.D. or medical degree with research experience using radiotracers in biomedical research and/or in studying dopaminergic neurotransmission would be advantageous. Research will involve the development of radiotracers for positron emission tomographic (PET) and single photon emission-computed tomographic (SPECT) imaging and elucidation of the pharmacology of these tracers in rodents.

Interested candidates should send curriculum vitae and three letters of reference (referring to Position MK8580) to: M. Kipperman, Brookhaven National Laboratory, Building 185, P.O. Box 5000, Upton, NY 11973-5000. Visit our website: www bnl.gov. Brookhaven National Laboratory is an Equal Opportunity Employer committed to workforce diversity.

#### POSTDOCTORAL RESEARCH ASSOCIATE STRUCTURAL BIOLOGY

As part of a multidisciplinary program, positions are available to examine the conformation and dynamics of damaged DNA and repair proteins. The selected candidate will determine solution structures of lesioncontaining DNA duplexes and DNA/protein complexes using NMR spectroscopy and computational methods. Applicants must have a Ph.D. in chemistry, biophysics, or a related field and strong background and practical experience in NMR spectroscopy. Salary will be commensurate with experience. Send curriculum vitae and the names of three references to: Carlos de los Santos, Department of Pharmacological Sciences, BST8–140, State University of New York at Stony Brook, Stony Brook, NY 11794-8651. FAX: 516-444-3649; e-mail: cds@pharm. sunysb.edu. Affimative Action/Equal Opportunity Employer.

POSTDOCTORAL: immediate opening; prefer experiences in immunohistochemistry, *in situ* hybridization, electrophoresis, DNA analysis, cell culture, cytogenetic analysis. Research in carcinogenesis, gene damage, and AIDS-related project. Send curriculum vitae with a cover letter summarizing expertise, career goal, and references to: Jiang Gu, M.D., Ph.D., Professor, Department of Biomedical Sciences, UCOM 6000, University of South Alabama, Mobile, AL 36688 U.S.A. E-mail: jgu@usamail. usouthal.edu.

#### GRANTS

#### **WORKSHOPS**



## **Bristol-Myers Squibb**

Announces a Call for Grant Applications in the Area of HIV-Associated Metabolic Disturbances. BMS, as a leader in HIV therapy, recognizes the need to study the pathophysiological mechanisms contributing to HIV-associated lipodystrophy/lipoatrophy and fat redistribution syndrome, and its associated dyslipidemia and metabolic disturbances. Grant proposals examining potential molecular, biochemical, metabolic, immunologic, virologic, and pharmacologic mechanisms will be accepted for review by the BMS Lipodystrophy Basic Science Task Force.

#### Grant applications can be obtained by contacting:

#### Yanina Wachtfogel

Chair, BMS Lipodystrophy Basic Science Task Force Bristol-Myers Squibb Oncology/Immunology 777 Scudders Mill Road Plainsboro, NJ 08536 (609) 897-3671

#### AWARDS

#### CLINICAL RESEARCH CALL FOR NOMINATIONS THE DORIS DUKE CHARITABLE FOUNDATION

DISTINGUISHED CLINICAL SCIENTIST AWARD FOR EXCELLENCE IN "BENCH TO BEDSIDE" RESEARCH

The Doris Duke Charitable Foundation is soliciting nominations for the Doris Duke Distinguished Clinical Scientist Award. Awards of \$1.5 million will be made to as many as eight outstanding physician-scientists conducting "bench to bedside' (translational) clinical research in the following disease areas cancer, cardiovascular diseases, AIDS and sickle cell anemia and other blood disorders.

Academic medical centers and other non-profit research institutions are invited to nominate one candidate in two of the four disease areas. Nominations and the accompanying brief preproposals must be received by May 29, 2000.

Nominees must have received a M.D. or M.D./PhD from an accredited institution, and have a fulltime university faculty appointment at the level of associate professor or the equivalent by September 2000. Investigators

who have been appointed to the level of professor or the equivalent within five years of the September 2000 application date for the award also are eligible. Nominees must spend at least 75% of their time conducting clinical research.

In July 2000, following a review of the preproposals, approximately 22 individuals will be selected to submit applications (due in September 2000). Following a peer review process, up to eight awards will be made to outstanding physician-scientists whose research bridges the gap between science and clinical research.

The Doris Duke Distinguished Clinical Scientist Award announce ment, containing a description of the required preproposal package and the submission instructions, can be downloaded from our website at http://ddcf.aibs.org/dcsa. Please e-mail questions to ddcf@aibs.org.



# **INITIATIVE**

An NIH Resource Center

## METHODS AND **APPLICATIONS OF MOLECULAR DYNAMICS TO** BIOPOLYMERS Workshop: June 4-7 Application Due: April 21

## BUILDING **COMPUTING CLUSTERS FOR BIOMED RESEARCH** Workshop: July 13-15

Application Due: June 1

## **STRUCTURE DETERMINATION USING NMR**

Workshop: July 26-29 Application Due: June 14

## NUCLEIC ACID AND **PROTEIN SEQUENCE** ANALYSIS Workshop: August 13-18

Application Due: June 30

Applications, detailed information and support at: http://www.psc.edu/biomed/workshops.html

direct inquires to: Nancy Blankenstein Pittsburgh Supercomputing Center 4400 Fifth Avenue, Room 230C Pittsburgh, PA 15213 biomed@psc.edu or 412-268-4960



Two POSTDOCTORAL FELLOWSHIP PO-SITIONS are available to study the neurochemical and electrical properties of bladder reflex pathways following spinal cord injury or inflammation. Position 1: Applicant should be trained in molecular techniques with experience in the synthesis of riboprobes. Position 2: Applicant should be trained in patch clamp recording techniques. Studies will examine the electrical properties of dissociated dorsal root ganglion cells. The roles of neurotrophic factors in lower urinary tract function following injury/inflammation are also investigated. Applicants should be strongly motivated, with excellent written and verbal communication skills. The Fellowships are offered for two years with future funding dependent on laboratory funding. A start date on or before October 2000 is required. Send curriculum vitae, statement of research interests, and three letters of reference to: Margaret A. Vizzard, Ph.D., University of Vermont College of Medicine, Department of Neurology, E219 Given Building, Burlington, VT 05405. E-mail: mvizzard@zoo.uvm.edu; Telephone: 802-656-3209.

**POSTDOCTORAL POSITION** in hematopoietic stem cell laboratory. NIH-funded position available immediately. Candidates must have M.D. and/ or Ph.D. and strong background in cell biology and/ or molecular biology required. Projects are focused on understanding the molecular and cellular mechanisms of leukemogenesis using the NOD/SCID mouse model as functional assay in the laboratory of Dominique Bonnet, Ph.D., Assistant Professor, Laboratory of Cellular and Molecular Biology of Hematopoiesis(seewebsite:http://arginine.umdnj.edu/ coriell/bonnet.htm). Send curriculum vitae and the names of three references to: C. Tule, Coriell Institute for Medical Research, 401 Haddon Avenue, Camden, NJ 08103 U.S.A. FAX: 856-964-0254; e-mail: tuleci@umdnj.edu. Affirmative Action/Equal Opportunity Employer.

**POSTDOCTORAL POSITIONS** available to study the genomic effects of dietary anticarcinogens on postinitiation phases of cancer development. Projects focus on molecular mechanisms of regulation of mammary tumor progression. Applicants should have a Ph.D. with experience and training in molecular and cell biology. Send curriculum vitae and names of two references to: Dr. Leonard Bjeldanes, Division of Nutritional Sciences and Toxicology, University of California, Berkeley, CA 94720-3104. FAX: 510-642-0535. E-mail: Ifb@nature. berkeley.edu. Desirable start date: July 1, 2000. The University of California is an Equal Opportunity/Affimative Action Employer.

#### POSTDOCTORAL POSITIONS FUNCTIONAL GENOMICS

Postdoctoral positions in functional genomics/ proteomics are available immediately. Candidates should be highly motivated with a strong background in molecular biology or informatics. Send research interests, curriculum vitae, and three references to: C. Wilson Xu, Ph.D., Sloan-Kettering Institute and Graduate School of Medical Sciences of Cornell University, 1275 York Avenue, New York, NY 10021. FAX: 212-639-2767; e-mail: w-xu@ski. mskcc.org.

Two **POSTDOCTORAL POSITIONS** are available in the program of cardiovascular sciences at the University of Illinois at Chicago to study cardiac muscle function and cellular determinant of muscle growth. The ideal candidate should have background in calcium imaging, cellular electrophysiology, and/ or molecular biology. U.S. citizenship or permanent residency status is preferred. Please send curriculum vitae and names of three references to: Peter M. Buttrick, M.D., and/or Beata M. Holska, Ph.D., University of Illinois at Chicago, Department of Medicine, Section of Cardiology (M/C 787), 840 South Wood Street, Chicago, IL 60612.

#### POSITIONS OPEN

#### POSTDOCTORAL POSITIONS UNIVERSITY OF PENNSYLVANIA SCHOOL OF MEDICINE

American Heart Association and American Diabetes Association-funded research to study insulin signaling. Current research involves the regulation of transcription factor Egr-1 expression and its role in the pathophysiology of diabetic vascular diseases. Successful candidates will have a Ph.D. or M.D. with a strong background in cell and/or molecular biology, biochemistry, and signal transduction. Send curriculum vitae and names of three references to: Dr. Shuko Harada, Department of Pathology and Laboratory Medicine, D101 Richards Building, 37th and Hamilton Walk, Philadelphia, PA 19104. FAX: 215-573-2350; e-mail: haradas@ mail.med.upenn.edu. Equal Opportunity/Affirmative Action Employer.

**POSTDOCTORAL POSITION** available in a laboratory studying a recently discovered endogenous inhibitor of the inositol 1,4,5-trisphosphate receptor (Watras et al., *Biochemistry*, April 2000). Previous experience with patch clamping and the measurement of intracellular calcium using fluorescent dyes is highly desirable. Please send letter of interest, curriculum vitae, and the names of three references to: Dr. James Watras, Department of Physiology, University of Connecticut Health Center, 263 Farmington Avenue, Farmington, CT 06030-3505. FAX: 860-679-1269; e-mail; watras@sun.uchc.edu. An Affirmative Action/Equal Opportunity Employer. Minorities/Females/Persons With Disability/Veterans.

#### PROTEIN INTERACTIONS IN MEMBRANE TRAFFIC

Two **POSTDOCTORAL FELLOWS** sought to develop novel proteomic method for probing mechanisms in vesicular membrane traffic. Project involves close interaction with Harvard Institute of Proteomics. Experience with cloning, library constructions, and other molecular biological methods essential. Knowledge of yeast or mammalian cell biology also required. Please apply with curriculum vitac and names of three references to: **Prof. T. Kirchhausen, Harvard Medical School, 200 Longwood Avenue, Boston, MA 02115.** 

**POSTDOCTORAL FELLOWSHIP**: Harvard Medical School. Position available immediately to study biochemical and cellular regulation of nitric oxide synthase signal transduction pathways. Applicant must have strong background in protein biochemistry, as well as experience in cell biology and/or cellular imaging. Submit curriculum vitae, research interests, and names of three references to: Thomas Michel, Ph.D., M.D., Cardiovascular Division, Brigham and Women's Hospital, Harvard Medical School, 75 Francis Street, Boston, MA 02115. FAX: 617-732-5132. E-mail: michel@calvin.bwh. harvard.edu.

#### POSTDOCTORAL POSITION

Position immediately available. Expertise in systematic evolution of ligands by exponential enrichment (SELEX) process is required. The successful candidate should have a Ph.D. in biochemistry, molecular biology, or related discipline. A strong publication record is desired.

FAX detailed curriculum vitae and three references to:

#### Dr. Irina Bakaltcheva FAX: 301-319-9965

**POSTDOCTORAL POSITION** to investigate renal magnesium regulation using proteomics and molecular biology. Send curriculum vitae with references to: Dr. John Arthur, Kidney Disease Program, University of Louisville, 615 South Preston Street, Louisville, KY 40202. E-mail: jarthur@ louisville.edu. The University is an Affirmative Action/ Equal Opportunity Employer.

#### POSITIONS OPEN

**POSTDOCTORAL POSITION** at Columbia University, Health Sciences campus, for M.D., Ph.D., or equivalent degree to study biochemical mechanisms of action of agents that affect bone cell function. Individual must have experience in study of signal transduction systems, RIA, protein purification, and isolation, Western and Northern blot techniques, FPLC, and HPLC, as well as tissue culture. Send curriculum vitae and reference list to: **Dr. Stephen A. Morris, Department of Medicine, Columbia University College of Physicians and Surgeons, Box 92, 630 West 168th Street, New York, NY 10032.** *Columbia University takes Affinnative Action to cusure Equal Opportunity. We are particularly interested in applica-*

tions from women and minorities. **POSTDOCTORAL POSITION** available to study structural elements in G protein-coupled extracellular calcium-sensing receptor that enable it to interact differentially with various intracellular signaling

teract differentially with various intracellular signaling molecules, including Gq/11 and Gi. Candidates with a Ph.D. degree in biological sciences should send résumés to: Mei Bai, Endocrine Division, Brigham and Women's Hospital, Harvard Medical School, 221 Longwood Avenue, Boston, MA 02115. Email: mbai@rics.bwh.harvard.edu.

#### EUROPEAN OPPORTUNITIES

EDITOR/WORKSHOP COORDINATOR

The Third World Network of Scientific Organizations (TWNSO) seeks an editor/workshop coordinator for a two-year project examining successful experiences in the sustainable use of dryland ecological resources in the developing world. The project is funded by the United Nations Development Programme (UNDP) Global Environmental Facility (GEF).

Goals include: publication of a monograph, organization of a series of workshops, and creation of an interactive website to encourage exchange of information and ideas among government agencies, research centers, universities, and grassroots organizations.

A Master's degree, preferably in a related scientific field, and at least two years of experience in the editing of scientific information and workshop organization is desired. Applicants should be fluent in English and willing to relocate to Trieste. Send detailed curriculum vitae, brief writing samples, and salary requirements to: TWNSO Secretariat, c/o ICTP, Strada Costiera 11, 34014 Trieste, Italy. FAX: +39040224559; e-mail: twnso@ictp.trieste.it.

#### GLOBAL OPPORTUNITIES

#### TENURE-TRACK ACADEMIC POSITIONS TEL AVIV UNIVERSITY Sackler School of Medicine

The Sackler School of Medicine seeks outstanding candidates to fill a number of tenure-track academic positions at the levels of **LECTURER**, **SENIOR LECTURER**, and **ASSOCIATE PROFESSOR**. Candidates must hold a Ph.D. or M.D. degree and have postdoctoral experience. Successful candidates will be expected to develop an independent, vigorous research program and be involved in teaching medical and graduate students. An appropriate start-up package will be offered.

Preferred fields of research are: human biology, neurosciences, drug research, molecular genetics, cell biology, functional genomics, bioinformatics, structural biology, microbiology, immunology, metabolism, and physical anthropology. Applicants should send their curriculum vitae, list of publications, and a statement of research program to the address below, and ask at least three references to send letters of reference to the same address:

> The Search Committee c/o Mr. Amit Nitzan Sackler School of Medicine Tel Aviv University Ramat Aviv 69978 Israel E-mail: amitn@post.tau.ac.il

Applications and letters should reach the Search Committee no later than June 1, 2000.

#### **GLOBAL OPPORTUNITIES**

#### RESEARCH POSITION MOLECULAR BIOLOGY

Applications are invited for a permanent research position at the Institute of Animal Sciences (website: http://www.agri.gov.il./) to join a group in molecular biology of calcified and connective tissues in avian. Applicants should have a Ph.D. degee with at least one year of postdoctoral experience. Send curriculum vitae with names and addressess of three references to: Dr. A. Bar, Institute of Animal Science, ARO, The Volcani Center, P.O. Box 6 Bet Dagan 50250, Israel. E-mail: ariebar@agri.gov.il. Applicants should be eligible for an Israeli citizenship. Application deadline is June 30, 2000.



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