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A partnership between Duke University in the United States and the National University of Singapore, the Duke-NUS Graduate Medical School Singapore believes in challenging remarkable individuals who have the passion for discovery.

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Postdoctoral Fellowships: All Research Programs at Duke-NUS are currently recruiting research fellows. Interested individuals are encouraged to communicate directly with the relevant Principal Investigator.

For more information on Careers and Research Programs at Duke-NUS, visit www.duke-nus.edu.sg

Transforming Medicine, Improving Lives
SINGAPORE’S SCIENCE BET

Singapore has fast become a significant biomedical hub. But can it maintain the momentum? **By Gunjan Sinha**

In a quiet room, two men stare wide-eyed at a television on the distant wall—cars race around a track. The men, wired with electrodes, appear to be playing a video game, although there are no joysticks to be seen. Tap one of them on the shoulder, however, and a car will stop moving.

This is no ordinary video game and these are no ordinary men. They are scientists at the Singapore Institute for Infocomm Research, part of the Agency for Science Technology and Research (A*STAR), and they are developing a tool that can potentially help children and adults with attention deficit hyperactivity disorder learn how to focus. The research project is just one example of the “cross-cutting, interdisciplinary research going on at A*STAR,” says Charles Zukoski, chair of A*STAR’s Scientific Engineering Research Council (SERC). Indeed, at a time when the term “interdisciplinary research” has become the mantra of good science policy, A*STAR is embracing the idea with gusto.

The video game research project is taking place in Singapore’s Fusionopolis—a new 120,000 square-meter, two-tower complex that houses research labs, serviced apartments, a fitness club, a swimming pool, shops, and even a movie theater. Opened last fall, Fusionopolis aims to bring research scientists, engineers, and technology experts from A*STAR and those from the private sector together under one roof. The idea is to spur interdisciplinary research that is commercially viable.

Fusionopolis sits adjacent to Biopolis, a seven-building research facility opened five years ago that is A*STAR’s primary home. Over a decade ago the Singapore government declared science and technology to be an essential pillar of the country’s economy. With no natural resources and facing tough competition from neighboring countries for foreign investment, the government implemented a plan to capitalize on its most valuable asset: human knowledge. Both Fusionopolis and Biopolis represent that commitment.

Certainly the goal of a knowledge-based economy isn’t unique to Singapore. The European Union, for one, identified the same goal as part of its Lisbon strategy in 2000. And yet A*STAR, with its roughly 2,250 scientists, has created global buzz. Its advisory board reads like a list of scientific who’s who. World-renowned scientists are known to drop by from time to time just to see the place or give a lecture. As one indicator of success, the number of scientific papers produced at the Institute of Molecular and Cell Biology (IMCB), an A*STAR institute, jumped from 82 in 2000 to 165 in 2006, according to Thomson Scientific. And the rate of scientific citations rivals those of institutions with longer histories.

Why has Singapore been so successful in such a short time? “It is the ability to focus and plan for the future,” says Zukoski. Singapore has set up a mechanism to bring in talent from around the world and send local talent abroad to get educated, he explains. These Singaporeans often return to Singapore, drawn by modern facilities, continued »
A*STAR Investigatorships aim to support and promote early independent career development of the next generation of world leaders in scientific research. Applicants should have obtained their PhD not more than 48 months prior to the application date, and should have already demonstrated a strong ability and creativity in research. Applicants with MD-PhD should be in their last year of, or have completed their clinical specialty training at the time of application.

The award provides for an independent position for a duration of 3+3 years, with a review at the end of the 2nd year and a possibility of “fast-track” promotion. Tenable at one of A*STAR’s prestigious biomedical research institutes, A*STAR Investigators may select a mentor from A*STAR but will conduct and publish their research independently.

A*STAR Investigators will receive attractive remuneration, support for set-up costs, research funding, research staff and access to state-of-the-art scientific equipment and facilities including the Biopolis Shared Facilities and the Biological Resource Centre. Each A*STAR Investigator’s laboratory will be funded with up to US$500K p.a.

Up to ten shortlisted candidates will be invited to Singapore for interviews and a review based on a scientific presentation, expected to be held in September 2009. Applications close on 31 May 2009.

Applicants are requested to submit their CVs, including 3 letters of reference from academic referees, and a 5-page research proposal (1 hard copy and 1 soft copy) to:

BMRC A*STAR Investigatorships
Agency for Science, Technology & Research
20 Biopolis Way, #08-01 Centros, Singapore 138668
Email: A-STAR_ADMIN@BMRC@a-star.edu.sg
http://www.a-star.edu.sg/astar_investigators

Candidates with research interest in these areas are strongly encouraged to apply:
- Bioimaging
- Biosensors and Biodevices
- Cell and Tissue Engineering
- Computational Biology in Systems Modeling or Transcriptional Regulation
- Discovery of Biomolecular Mechanisms using Theoretical Approaches
- Drug and Gene Delivery
- Epigenetic Regulation of Gene Expression
- Epithelial Biology
- Metabolic Medicine
- Molecular and Cellular Human Immunology
- Neuroscience
- Pharmaceuticals Synthesis and Nanobiotechnology
- Stem Cells

The A*STAR Investigatorships Selection Panel
Professor Tadakata Yamada, President, Global Health Program, Bill and Melinda Gates Foundation
Professor Sir David Lane, Chairman, Biomedical Research Council, A*STAR; and Chief Scientist, Cancer Research UK
Professor Edward Holmes, Executive Deputy Chairman, Translational and Clinical Sciences, Biomedical Research Council, A*STAR; Executive Chairman, National Medical Research Council, Singapore
Professor Alex Matter, Director, Novartis Institute for Tropical Diseases
In 2008, the Singapore Agency for Science, Technology & Research (A*STAR) began bringing together physical science and engineering research institutes at the iconic Fusionopolis (http://www.fusionopolis.a-star.edu.sg). We invite applications for the A*STAR Investigatorships, which will support and promote the early career development of potential leaders in physical sciences and engineering research. Applicants should ideally have obtained their PhD within 24 months (and at most not more than 48 months) of the application date, and have demonstrated strong ability and creativity in research.

The awardee will be offered a research position at one of A*STAR’s prestigious science and engineering research institutes and a grant to support research for a duration of 3 years, renewable for a further 3 years. A*STAR Investigators will select a mentor from A*STAR’s research institutes and will be able to collaborate with other A*STAR researchers as they conduct and publish their research independently.

A*STAR Investigators will receive attractive remuneration, support for set-up costs, research funding, research staff and have access to state-of-the-art scientific equipment and facilities.

Applications will close on 31 May 2009. Shortlisted candidates will be invited to Singapore for interviews, which will include a scientific presentation at an open symposium. These are expected to be held on September 2009. It is expected that the awards will commence in early 2010. Applicants are requested to refer to the application form and guidelines found on the website (http://www.a-star.edu.sg/astar_investigators_serc) and to submit their completed applications to:

SERC A*STAR Investigatorships
Agency for Science, Technology & Research
1 Fusionopolis Way, #18-10 Connexis North Singapore 138632
Email: A-STAR_SERC_Investigatorships@a-star.edu.sg
http://www.a-star.edu.sg/astar_investigators_serc

Each A*STAR Investigator’s laboratory would have a research allocation of up to US$500K p.a.

Candidates are invited to apply in the following areas:
- Cognitive Systems, including Robotics
- Metamaterials and Plasmonics
- Bioenergy and Energy Storage Technologies
- Medical Technologies for Diagnostics

The A*STAR Investigatorship Selection Panel includes the following:
- Professor Charles Zukoski, Chairman, SERC, A*STAR and Vice Chancellor for Research at University of Illinois at Urbana-Champaign;
- Professor Stephen Long, Deputy Director of Energy Biosciences Institute, and Professor of Crop Sciences at University of Illinois at Urbana-Champaign;
- Professor Andrew Ortony, Professor of Psychology, Education and Computer Science at Northwestern University; and
- Professor William Tang, Associate Dean for Research and Professor of Biomedical Engineering at University of California, Irvine.
good funding opportunities, and the chance to work with renowned scientists.

Singapore has already spent S$12 billion (Singapore dollars) — and has committed to an additional S$13.55 billion (US$9.16 billion) from 2006 through 2010 — to transform the city-state into a public and private research and development hotspot. Whether this will translate into economic growth over the long term is still uncertain. But most experts agree that if current indicators are a measure of long-term success, then Singapore is right on track.

**Betting on Science and Technology**

Seven years ago, Singapore folded its existing national research labs into what is now known as A*STAR. The agency consists of two primary research organizations, the Biomedical Research Council (BMRC) and SERC, each of which is further broken down into seven institutes.

Although A*STAR is often compared to the US National Institutes of Health in terms of organization, the agency is much more goal-oriented. In addition to its research institutes, A*STAR also has two other arms — the Graduate Academy and a division called Exploit Technologies. The academy manages and promotes scholarships in the sciences to support foreign students in Singapore and Singaporean students abroad. The Exploit Technologies arm manages any intellectual property created by the research institutes and facilitates the transfer of technology from the research institutes to industry. A*STAR is funded by the ministry of trade and industry and, as such, its goal is to grow the economy.

“We sit between universities and industries,” Zukoski explains. “Either we discover the new stuff that we need to solve a problem or we harvest the basic research from the universities. We can also seed universities to do that research. We then work on it, harden it, and either pass it on or launch a startup company.”

For example, Fusionopolis scientists are developing a heart monitor that can communicate with a cell phone. The cell phone can continuously record signals from the monitor and alert the wearer and a health care professional of a problem. Such a project links scientists who design computer hard drives, build algorithms, understand wireless technology, and engineer heart monitors. Scientists are also collaborating with doctors at the university hospital. Such expertise is normally scattered across research institutes, says Zukoski; Fusionopolis brings all that expertise together in one place.

To ensure that such goal-oriented interdisciplinary research takes place, groups of collaborators will work toward solving specific problems rather than pursuing disparate research projects. Moreover, they will focus in four specific areas: energy technology, aerospace, health care, and future living. And the public spaces at Fusionopolis serve as test beds for innovations. A retail store in the complex, for example, will test Asia’s first intelligent shopping cart that can automatically locate items in the store.

Last year, A*STAR launched a landmark aerospace research program involving industry scientists at Boeing, EADS, Pratt and Whitney, and Rolls-Royce. These industry giants signed on to collaborate with A*STAR’s scientists on research covering inspection and testing, manufacturing, advanced materials, and computational modeling. One collaborative project, for example, seeks to develop lasers that can tool lightweight composite materials, used today in many airplane and automobile parts. But such material is prone to damage during trimming and drilling. Lasers would eliminate such wear and tear and might speed up manufacturing because they can be automated.

Another project will try to develop nondestructive testing and inspection techniques for airplanes. Current protocols involve dismantling and reassembling aircraft components, which is laborious and time-consuming. Portable, nondestructive tests to inspect airplane parts would save both time and money.

**New Opportunities**

Fusionopolis represents an entirely new model of a way that research and development can be done. “There aren’t models like this in the United States,” says Zukoski, who was head of the Department of Chemical Engineering and vice chancellor of research at the University of Illinois until October 2008, when he moved to Singapore to head SERC. “One of the attractions here was to work under this type of system,” he adds.

Other scientists have been lured to A*STAR for similar reasons. “As the nature of scientific research changes, there is more need for scientists to work together for a common goal,” says Sir George Radda, deputy chair of the Singapore Bioimaging Consortium (SBIC) at the BMRC. Radda was a pioneer in the use of NMR spectroscopy to study tissue metabolites during the 1970s and 1980s. He also chaired the United Kingdom’s Medical Research Council between 1996 and 2004, and was head of the departments of Physiology, Anatomy, and Genetics at Oxford University. He has always tried to bring together the physical and engineering scientists with biomedical researchers, he says. But Singapore represents a unique opportunity to form synergies. “Given the strengths and proximity of the SERC research institutes and the BMRC research institutes as well...continued»
Inspiring innovation for next-generation drug discovery.

Eli Lilly and Company is a leading, innovation-driven pharmaceutical corporation with a firm commitment to help people live longer, healthier and more active lives by making breakthroughs in medicines and treatments.

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The Integrative Computational Sciences (ICS) group at Lilly Singapore Centre for Drug Discovery (LSCDD), provides state-of-the-art computational solutions to enable the global efforts of drug discovery, translational medicine and tailored therapeutics at the post genomic era.

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Lilly Singapore is expanding and the ICS group is looking for candidates in the following positions:

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- Sr. Bioinformatics Scientist
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The successful candidates will work closely with their bioinformatics, statistics and software engineering peers at ICS and will collaborate with biologists, chemists, geneticists and physicians at Eli Lilly. We work closely with Lilly System Biology and Drug Discovery Research teams at Singapore as well as with the Discovery Informatics organization and the Global Discovery Statistics group in Europe and USA.

Minimum requirements:
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- 3 years' post-graduation experience
- Background in Oncology / Diabetes / Cardiovascular Neuroscience
- Statistics: SAS/R/S-Plus/Partek
- OS: Unix/Linux, Windows
- Databases: Oracle/SQL/mySQL
- Scripting: Perl, Shell

Preferred Experience:
- Industry experience in Biotech/Pharmaceutical/Drug Discovery
- Experience in the analysis of large data sets such as microarrays, sequencing, proteomics and imaging data
- Strong publications record
- Demonstrated learning agility
- Excellent communication and multidisciplinary collaborative skills

For more information and online application, please visit www.lscdd.lilly.com.sg/lscdd/careers.

www.lscdd.lilly.com.sg

Answers That Matter.
Division of Physics and Applied Physics
School of Physical and Mathematical Sciences

Faculty Search: Condensed Matter Physics, Biophysics and Quantum Optics

The Nanyang Technological University (NTU), an excellence-driven research university in Singapore, is inviting candidates with internationally proven track record to apply for positions at the Associate or Full Professor levels in the Division of Physics and Applied Physics. Candidates with potential for distinction may also apply for tenure track positions at the Assistant Professor level.

We are looking for applicants whose research agenda complements existing departmental strengths, including:

- nanoscale materials
- correlated electron systems
- quantum optics

For the experimental positions, we particularly encourage applicants with a strong record in the development of new techniques including applications of precision measurements to the abovementioned areas. For the theory positions, expertise in materials, biomolecular physics or optics is desirable.

The Division has in place a broad cross disciplinary program with Materials Science, Engineering, Mathematical and Biological Sciences, and Chemistry, which is enhanced by an extensive infrastructure for the fabrication and sophisticated characterization of materials.

Candidates should submit a curriculum vitae, publications list, research plan, and arrange to have three letters of reference sent to us. Electronic submissions are strongly encouraged – use Subject: Faculty Search, and send to: LaiChun@ntu.edu.sg

Further information at: www.spms.ntu.edu.sg/PAP/

Applications will be accepted until the positions are filled, but only those received by 31 May 2009 will be assured of full consideration. The appointment will begin on or around 1 Oct 2009 depending on the circumstances of the successful applicant.

Professor of Chemistry

Nanyang Technological University (NTU), a top research university in Asia-Pacific, is building its science school rapidly and is inviting outstanding candidates with internationally proven track record to apply for a number of positions as Professor of Chemistry with emphasis in the following areas:

- Chemistry and Biological Chemistry
- Bioorganic, Biomimetic, Bioanalytical and Biophysical Chemistry
- Food Chemistry
- Green Chemistry
- Medicinal Chemistry
- Organometallic and Coordination Chemistry
- Physical and Analytical Chemistry
- Synthesis Methodology and Catalysis
- Theoretical and Computational Chemistry

We seek candidates with distinguished achievement in research and excellence in teaching. Singapore has multiple sources for competitive research funding and NTU provides the environment for cutting edge interdisciplinary research.

Candidates with potential for distinction may also apply for tenure-track positions at the Assistant Professor or Associate Professor level. Further information at: www.spms.ntu.edu.sg/CBC/

Enquiries to: Search Committee

Division of Chemistry and Biological Chemistry
School of Physical and Mathematical Sciences
Email: weiting@ntu.edu.sg

www.ntu.edu.sg

Principal Investigators
Computational Biology and Bioinformatics

The Genome Institute of Singapore is dedicated to basic and applied research, with an emphasis on the use of genomic information and technologies. Situated in Singapore’s Biopolis science park, we are a key component of the country’s rapid and continuing drive to become a center of biological and medical research.

We are expanding our strength in computational biology and invite applications at all levels. We have strong programs in genomic structure, gene regulatory interactions and networks and epigenomics, but welcome applicants with expertise in all areas of bioinformatics and quantitative biology. Applicants are asked to submit a CV, a statement of research interests, and the names of three references by e-mail to: gisrecruit@gis.a-star.edu.sg

Post-doctoral Fellows

The Genome Institute of Singapore is an internationally diverse research institute involved in a variety of research areas, with an emphasis on the use of genomic information and technologies. Situated in Singapore’s Biopolis science park, we are a key component of the country’s rapid and continuing drive to become a center of biological and medical research.

We invite applications for post-doctoral fellows in all areas of interest to our Institute. Particular areas of interest include computational biology and bioinformatics, stem cells and early development, cancer, and infectious diseases. Qualified applicants are asked to submit a CV and a cover letter by e-mail to: gisrecruit@gis.a-star.edu.sg

www.ntu.edu.sg
as the universities and hospitals, I very much hope to be able to contribute to promoting such interactions in Singapore.”

Seasoned scientists aren’t the only ones being drawn in; A*STAR is attracting promising young talent, too. A few years ago, Leonid Krivisky applied to A*STAR for a young investigatorship award. The award offered him his own lab and US$500,000 each year for three years. The 29-year-old physicist wrote a proposal to study how photoreceptors in the eye respond to quantum light, which has applications in designing artificial intelligence systems. He landed the award and started assembling his lab just last fall. “I couldn’t pass up the opportunity,” he says.

Biomedicine Takes Off

To be sure, research such as Krivisky’s can take years to turn into commercially viable technology, but the government understands this risk. Meanwhile, economic indicators suggest that the biomedical industry is thriving. Biomedical sciences manufacturing output expanded fourfold from S$6.3 billion (US$4.2 billion) in 2000 to S$24 billion (US$15.9 billion) in 2007, at a compounded annual growth rate of 21 percent, far surpassing the industry’s global growth rate. Private spending on biomedical research and development in 2005 reached 35 percent of the nation’s total research and development spending, up from 28.5 percent in 2001. And in 2007 alone, the biomedical science sector hired more than 12,500 people and accounted for 5 percent of Singapore’s gross domestic product, according to Singapore’s Economic Development Board (EDB).

That biomedical companies find Singapore an attractive place to set up shop is nothing new. Biomedical manufacturing has been thriving since the mid 1980s, when the EDB put several measures in place to lure industry. Companies that, for example, are the first to manufacture a novel drug or medical device in Singapore may be eligible to receive “pioneer” status and pay no tax on any income earned from that drug or device. EDB also offers a number of research and development grants that can subsidize up to 50 percent of a company’s capital expenditure, depending on what type of skills and expertise it is planning to bring into Singapore.

The incentives have been “very successful,” says Jiu Lim, CEO of Merlin MD in Singapore who formerly worked for the private equity arm of the EDB. Not only are all the major pharmaceutical companies represented in Singapore, but within the past three years Genentech, GlaxoSmithKline, Lonza, and Novartis announced decisions to build a total of five major... continued »
Temasek Life Sciences Laboratory (TLL) is a Research Institute established to undertake cutting edge research in cell and molecular biology and genetics. TLL is seeking applicants for Principal Investigator positions. Groups at TLL have interests in plant systems, fungal and microbial systems as well as animal systems. Current research interests include cell biology, developmental biology, neuroscience, fungal and viral pathogenesis. Further information is available at www.tll.org.sg. All areas of research in the life sciences will be considered.

Please submit your application (form downloadable from dbsl.nus.edu.sg) along with curriculum vitae, research plan and names of three external referees to:

Professor Paul MatsudaIRA   
Head, Department of Biological Sciences  
National University of Singapore, 14 Science Drive 4  
Singapore 117543, Republic of Singapore  
Fax: (65) 67795671  
Email: dbshead@nus.edu.sg  
Website: www.dbs.nus.edu.sg

Department of Biological Sciences  
Faculty Search on Mechanobiology  
The Department of Biological Sciences, National University of Singapore (NUS) invites applications at all levels of tenure-track faculty positions to join a new program in Mechanobiology.

The program aims at integrating cutting edge research in mechanobiology with both experimental and computational approaches to address fundamental questions in cell and tissue mechanobiology. This program is intended to study the interplay of mechanics and biology in different systems and settings. It is expected that faculty members will engage in both fundamental and applied research.

TLL is established to undertake cutting edge research in cell and molecular biology and genetics. It is seeking applications at all levels of tenure-track faculty positions to join a new program in Mechanobiology.

Faculty Position Assistant/Associate Professor/Professor at the National University of Singapore Department of Physiology  
The National University of Singapore invites applications for a full-time tenure-track faculty position in the Department of Physiology. Currently the department has research programmes in the following areas: The Cancer Biology Programme focuses on the study of apoptosis, experimental therapeutics, metastasis, DNA damage and repair, and telomere biology. The Immunology Programme is involved in the study of immune mechanisms in the inflammatory process, T cell biology and development and immunotherapy. The Neuroscience Programme focuses on systemic, molecular and cellular neurobiology with current strengths in the neurobiology of pain and the structure-function relationship of voltage-gated channels. The Quantitative Physiology and Engineering Programme involves the study and manipulation of the structural-function relationship of cells and tissue so as to enable tissue repair and regeneration.

Interested candidates should send their resume, research plan and names of six referees by August 2009 to: Dr. Tuck Wah Soong, Head, Department of Physiology, Yong Loo Lin School of Medicine, National University of Singapore, Block MD9, 2 Medical Drive, Singapore 117597 Email: phshead@nus.edu.sg Fax: (65) 6778 8161

Details are available at http://medicine.nus.edu.sg/phys/Recruitment_Teaching.html

For call enquiries: (65) 6516 1878

Department of Physiology  
NUS Yong Loo Lin School of Medicine  
A member of the National University Health System

The Institute of Bioengineering and Nanotechnology in Singapore is seeking highly motivated individuals who are interested in making an impact in advancing research and development in the following areas:

Drug and Gene Delivery  
Where the controlled release of various therapeutics involves the use of functionalized polymers and hydrogels for targeting diseased cells and organs, or for responding to specific biological stimuli.

Cell and Tissue Engineering  
Where biomimicking materials, stem cell technology and bioimaging are combined to develop novel approaches to regenerative medicine and artificial organs.

Pharmaceuticals Synthesis and Nanobiotechnology  
Which encompasses the efficient catalytic synthesis of chiral pharmaceuticals, and new materials for sustainable technology and alternative energy generation.

Biosensors and Biodiversity  
Which involve nanotechnology and microfabricated platforms for the detection and treatment of diseases, and the synthesis and screening of biologics.

Positions are available for Senior Group Leader, Group Leader, Principal Research Scientist, Senior Research Scientist, Research Scientist, Postdoctoral Fellow, Research Officer and Lab Officer in IBN’s four research areas.

If you are interested in joining a multi-disciplinary research institute at the cutting edge of bioengineering and nanotechnology, please forward a cover letter, your curriculum vitae, and a list of three references to:

Prof. Jackie Y. Ying, Executive Director  
Institute of Bioengineering and Nanotechnology  
37 Biopolis Way, The Nanos, #06-01, Singapore 138649  
Email: recruit@ibn.a-star.edu.sg  
Website: www.ibn.a-star.edu.sg

CAREERS IN BIOENGINEERING AND NANOTECHNOLOGY  
The Institute of Bioengineering and Nanotechnology in Singapore is seeking highly motivated individuals who are interested in making an impact in advancing research and development in the following areas:

Drug and Gene Delivery  
Where the controlled release of various therapeutics involves the use of functionalized polymers and hydrogels for targeting diseased cells and organs, or for responding to specific biological stimuli.

Cell and Tissue Engineering  
Where biomimicking materials, stem cell technology and bioimaging are combined to develop novel approaches to regenerative medicine and artificial organs.

Pharmaceuticals Synthesis and Nanobiotechnology  
Which encompasses the efficient catalytic synthesis of chiral pharmaceuticals, and new materials for sustainable technology and alternative energy generation.

Biosensors and Biodiversity  
Which involve nanotechnology and microfabricated platforms for the detection and treatment of diseases, and the synthesis and screening of biologics.

Positions are available for Senior Group Leader, Group Leader, Principal Research Scientist, Senior Research Scientist, Research Scientist, Postdoctoral Fellow, Research Officer and Lab Officer in IBN’s four research areas.

If you are interested in joining a multi-disciplinary research institute at the cutting edge of bioengineering and nanotechnology, please forward a cover letter, your curriculum vitae, and a list of three references to:

Prof. Jackie Y. Ying, Executive Director  
Institute of Bioengineering and Nanotechnology  
37 Biopolis Way, The Nanos, #06-01, Singapore 138649  
Email: recruit@ibn.a-star.edu.sg  
Website: www.ibn.a-star.edu.sg
biologics manufacturing facilities amounting to a US$1.5 billion investment. The facilities will be located in Tuas Biomedical Park that is already home to manufacturing facilities owned by Merck, Pfizer, and Wyeth, amongst others.

But even without economic incentives, Lim thinks that Singapore will continue to attract private investment. “Initially, the economic incentives were probably the primary driving force,” says Lim. “Subsequently, as we started churning out our own engineers and scientists, the quality of the people here certainly became a draw.” There are other factors, too. Singapore’s location in Asia at a mid point between India and China, for example, places it between the two biggest markets in the East. “Singapore also plays by the rules,” says Lim. “Here the rule of law prevails and that’s important.” This includes intellectual property laws.

As a testament, Lim points to the fact that there is a new wave of private investment from the biomedical industry, and the money isn’t only being spent on manufacturing facilities, but also on research and development centers. Some recent additions include: in 2007 GlaxoSmithKline opened a US$13 million medicinal chemistry outfit at Biopolis that doubled the company’s research staff in Singapore; Eli Lilly’s Singapore Center for Drug Discovery plans to boost its drug-discovery efforts, in part, by tripling its research and development staff to 150 within three years; the Novartis Institute for Tropical Diseases has grown to a staff of over one hundred researchers and supporting staff since its inception in 2002.

Success Not Guaranteed
But critics, such as Lee Wei Ling, head of Singapore’s National Neuroscience Institute, have argued that to transform the economy into one that that is truly knowledge-based, scientific talent must come from within. Right now, roughly 75 percent of the 500 or so Ph.D.-level Biopolis researchers, for example, are foreign born.

Lee has also questioned A*STAR’s research program which, in an opinion piece she wrote in Singapore’s Straits Times newspaper in 2006, she criticized as being too broad.

But whether a research program is too broad or too narrow depends on your point of view, counters Lim. “Some people believe in blue sky research while others think that research isn’t worth doing unless you have an objective. What is the right balance? That’s a matter of opinion.”

As for the ratio of foreign scientists to native Singaporeans, A*STAR, for example, is aiming for a 50–50 balance. Through its graduate academy, Singapore plans to send abroad and fund some one thousand students to earn undergraduate and graduate degrees at top foreign universities by 2015. And the presence of high caliber scientists in Singapore will provide incentives for them to return, say advocates of the program.

Economists at the World Bank have also expressed cynicism that Singapore’s investment in biomedical science will pay off, arguing that the best measure of success is when home-grown companies begin turning profits and start filing for initial public offerings. Even more discouraging: apart from Bio One Capital, the private equity arm of the EDB, which has some US$800 million in private equity to invest globally in startups, venture capital is nonexistent.

Like Europeans, Singaporeans tend to be more risk averse than say Americans, says Lim, which is why Singapore may lag in startups and attracting venture capital. Even the bright minds at A*STAR are finding it challenging to get their scientists to think big. “We are truly idea-limited, not money-limited,” says Zukoski. “Here you have the capacity to do really bold things. The management’s challenge is to get talented staff to think that way.”

Part of the solution, says Zukoski, is to reinvent management structure. Right now SERC leaders are spending a lot of time thinking through how the institute can best integrate research programs to foster collaboration and innovation, he says. Interdisciplinary research has been the focus of many universities. But the SERC model will be more efficient. Unlike universities that have a primary mission of educating, A*STAR’s goal is economic.

“In academia, we bemoan our lack of ability of do interdisciplinary research. But we certainly wouldn’t consider changing the management structure of the university to enable interdisciplinary research,” says Zukoski. “In SERC we are changing our structure. We can have people working on teams. We can set up compensation and evaluation schemes. And we can change the way problems are selected.”

The goal is lofty, he concedes. “But the thing that needs to be recognized is that A*STAR is not a university. We will hire academics and we will publish in top scientific journals, but we don’t have that educational mission. It’s all part of an exciting experiment. Not everyone would want to bet on our side. But it’s certainly an experiment worth watching.”

Gunjan Sinha is a freelance writer living in Berlin, Germany.
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The Center for Computational Medicine and Bioinformatics (CCMB, ccm.med.umich.edu) of the University of Michigan seeks outstanding applicants for tenure-track and tenured bioinformatics and biomedical informatics faculty positions at all levels. CCMB is the home of the NIH Roadmap-funded National Center for Integrative Biomedical Informatics (NCIBI.org), the UM CTSA Biomedical Informatics Program, 35 current Bioinformatics PhD students, and an NIGMS training grant. CCMB is actively engaged in national outreach for minority candidates and in translational bioinformatics research and training programs. CCMB is currently recruiting up to 3 senior and 5 junior faculty to establish independent individual and team-based research programs. There are opportunities to lead components of CCMB academic and instructional programs. Informatics research teams spanning parts of the basic to clinical spectrum are welcome. Specific partnerships are available with the Dept. of Human Genetics, the Comprehensive Cancer Center, the Systems Biology Division of the Dept. of Molecular & Integrative Physiology, the Brehm Center for Type 1 Diabetes Research and Analysis, and the Michigan Institute for Clinical and Health Research. For appropriate individuals, faculty leadership roles in Research Information Technology and operations are feasible more broadly in the Medical School and UM Health System. Successful candidates will have a PhD and/or MD degree and may have post-doctoral training in bioinformatics, biomedical informatics, computer science, genomics, proteomics, systems biology, clinical informatics or related fields. Publication and grant evidence of research productivity and interest in active participation in the CCMB graduate and post-doctoral instructional programs are required. The rank of selected candidates will depend upon experience and qualifications.

Applicants should send a letter of interest with curriculum vitae and a list of three or more references to: Search Committee, Center for Computational Medicine and Bioinformatics, Job Code 200, The University of Michigan, 2017 Palmer Commons, 100 Washtenaw Avenue, Ann Arbor, MI 48109-2218, e-mail: ccmrecruit@umich.edu. Ann Arbor is a remarkable cultural and living environment.

The University of Michigan is responsive to the needs of dual career families and is an Equal Opportunity Affirmative Action Employer.
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At Roche, our success is built on innovation, curiosity, and diversity – multiplied by 80,000 professionals in 150 countries. By challenging conventional thinking, and challenging ourselves, we’ve become one of the world’s leading research-focused healthcare groups, and one of the most exciting and open minded places to advance a career. To innovate healthcare, we’re constantly learning and growing – and seeking people who have those same goals for themselves.

At our Research facility in Nutley, New Jersey, we are expanding to become the headquarters for global Inflammation research activities. With a major focus in Rheumatology and Respiratory Diseases, we are committed to becoming the leader in Inflammation by shaping future treatment and rebuilding patients’ lives. Our world class laboratories across the globe are engaged in biomarker discovery, novel biologics platforms, RNA therapeutics and diagnostics, and we are poised to lead the field with novel innovative approaches. Our current job opportunities include:

Director, Rheumatology Drug Discovery
Senior In Vivo Respiratory Expert
Senior In Vivo Rheumatology Expert
Research Leader, Respiratory In Vitro
In Vivo Inflammation Pharmacologist

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Senior Research Positions 2009

ICREA announces the opening of 25 senior research positions in all fields of research.

Minimum requirements are a Ph.D. degree obtained before March 2005, preferably with four years of international exposure at the doctoral and/or post-doctoral level. Only those candidates with an outstanding research record and excellent leadership capabilities will be considered.

Successful applicants will have a permanent contract with ICREA and will work at universities, research centres and other cooperating institutions in Catalonia. Salaries will be in line with those paid at Catalan universities.

ICREA research professors will be subject to an evaluation of research progress and general performance after a three-year period, and subsequently every five years. A positive evaluation will lead to a salary increase.

For further details visit www.icrea.eu.

Applications and deadline

Applications must be submitted electronically via ICREA’s website www.icrea.eu. The website provides all the information needed to apply. Deadline: 16 April 2009.

*ICREA is a foundation jointly sponsored by the Ministry of Innovation, Universities and Enterprises of the Government of Catalonia (Generalitat de Catalunya) and by the Catalan Research and Innovation Foundation. ICREA’s main goal is to promote high-level research in Catalonia.

The European Chemicals Agency (ECHA) is the hub of REACH, a new regulatory framework for chemical substances in the European Union. REACH aims to improve the protection of human health and the environment while maintaining the competitiveness and enhancing the innovative capability of the EU chemicals industry.

ECHA is now recruiting the following staff:

Scientific Officers in Ecotoxicology, Environmental fate, (Q)SAR
Scientific Officers in Epidemiology
Scientific Officers in Immunotoxicology
Scientific Officers in Toxicology

The successful candidates will join a dynamic team engaged in establishing and operating the new regulatory framework, managing the technical, scientific and administrative aspects of REACH, ensuring consistency at Community level in its application and providing the Member States and the EU institutions with the best possible scientific and technical advice on chemicals.

They will work in ECHA’s headquarters in Helsinki, Finland, where they will be employed as Temporary Agents under article 2 a) of Conditions of Employment of Other Servants of the European Communities. ECHA is an equal opportunities employer.

The deadline for applications is 31 March 2009.

For more details, please consult our job opportunities on the ECHA website at: http://www.echa.europa.eu

http://www.echa.europa.eu

The University at Buffalo (UB), The State University of New York, School of Medicine and Biomedical Sciences, and the Hauptman-Woodward Medical Research Institute (HWI) invite applications from candidates for the position of Department Chair to lead expansion of the current Department of Structural Biology into a Department of Structural and Computational Biology. The successful candidate will be an established investigator with a strong record of competitive research funding and significant research accomplishments. He or she will possess personal qualities of leadership and vision equal to the task of building a program of research in computational structural biology that will complement and enhance the Department’s ongoing programs of research based on experimental studies of the three-dimensional atomic architecture of biological macromolecules and multi-molecular complexes and assemblies.

The Department is housed in the Hauptman-Woodward Medical Research Institute (HWI; www.hwi.buffalo.edu), which is recognized internationally as a leading center for crystallography-based research on biomolecular structure and function, and whose principal scientists constitute the faculty of the Department. HWI is located on the Buffalo-Niagara Medical Campus immediately adjacent to UB’s New York State Center of Excellence in Bioinformatics and Life Sciences (CoE; www.bioinformatics.buffalo.edu) and the Roswell Park Cancer Institute’s Center for Genetics and Pharmacology (www.roswellpark.org/Research). The CoE houses UB’s Center for Computational Research (www.ccr.buffalo.edu), a supercomputing facility capable of 14 teraflop peak performance that will be a collaborating resource for the new Structural and Computational Biology Department. The Department has a key role in fulfilling the aims of UB’s 2020 strategic plan as well as integrating basic science with the School’s expanding clinical and translational research programs.

Interested persons should supply a copy of their curriculum vitae and a description of their research plans, and arrange for three letters of recommendation to be submitted confidentially to www.ubjobs.buffalo.edu for posting number 0900066. Nominations or inquiries may be sent electronically to Dr. Bruce Holm, Chair Structural and Computational Biology Search Committee, baholm@buffalo.edu.

The University at Buffalo is an Affirmative Action/Equal Opportunity Employer.
Laboratory Head Positions at Janelia Farm

We invite applications from biochemists, biologists, chemists, computer scientists, engineers, mathematicians, neurobiologists, and physicists at all career stages who are passionate in their pursuit of important problems in basic scientific and technical research. We encourage applications from scientists at all career stages: from those just finishing their graduate degrees to senior, established scientists.

We will make appointments at one of two levels:

**Fellows**
- Fellows are independent scientists with labs of up to two additional members. Appointments are for five years.

**Group Leaders**
- Group leaders are independent scientists, similar to HHMI investigators, with labs of up to six additional members. The initial appointment is for six years. Thereafter, group leaders will be reviewed for reappointment every five years.

There are two application deadlines per year and the next are:
**July 15 and December 15, 2009**

At Janelia Farm, we pursue challenging basic biomedical problems for which future progress requires technological innovation. We focus on two research areas: the identification of general principles that govern how information is processed by neuronal circuits; and the development of imaging technologies and computational methods for image analysis.

Janelia Farm is now home to a growing and multidisciplinary community of 32 research groups, comprising postdoctoral associates, graduate students, and technicians. Our scientists are supported by outstanding shared resources within a unique campus less than an hour from Washington, D.C. All laboratories are internally funded, without extramural grants. Lab heads have no formal teaching duties and minimal administrative responsibilities. Janelia Farm offers a supportive working environment with on-site child care, fitness center, and dining facilities.

Because we value collaboration between groups as a mechanism to enable long-range innovative science, we limit the size of individual research groups. We encourage the self-assembly of interdisciplinary teams of scientists and support external collaborative science through a visiting scientist program.

The Howard Hughes Medical Institute is an equal opportunity employer. Women and members of racial and ethnic groups traditionally underrepresented in the biomedical sciences are encouraged to apply.

For more information and to submit an application:
[www.hhmi.org/ref/janelia/sci](http://www.hhmi.org/ref/janelia/sci)
Molecular and Cellular Biologists

Molecular and Cellular Oncology

The Department of Molecular and Cellular Oncology at The University of Texas M. D. Anderson Cancer Center is seeking outstanding molecular and cellular oncologists. The department has openings for two full-time, tenure-track faculty with demonstrated excellence in molecular and cellular approaches to understanding the molecular mechanisms of cancer development. Although not required, the following expertise is encouraged: proteomic/biochemical analysis, and signal pathways to elucidate the molecular mechanisms that cause cancer. Incumbents will be responsible for establishing their own independent research and expected to write grants and papers. Applicants must have a doctoral degree, postdoctoral experience and be eligible to apply for federal grants. Interested applicants should send a letter and curriculum vitae to:

Mien-Chie Hung, Ph.D.
Chair, Department of Molecular and Cellular Oncology, Box 108
The University of Texas M. D. Anderson Cancer Center
1515 Holcombe Blvd., Houston, Texas 77030
E-mail: nedwards@mdanderson.org

The University of Texas M. D. Anderson Cancer Center is an equal opportunity employer and does not discriminate on the basis of race, color, national origin, gender, sexual orientation, age, religion, disability or veteran status, except where such distinction is required by law. All positions at The University of Texas M. D. Anderson Cancer Center are security sensitive and subject to examination of criminal history record information. Smoke-free and drug-free environment.

For full details, or to request an application pack, visit www.liv.ac.uk/working/job_vacancies/ or e-mail jobs@liv.ac.uk
Tel 0151 794 2210 (24 hr answerphone)
Please quote Job Ref in all enquiries.

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- E fertile environment.

ETH

Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich

Assistant Professor in Chemical Systems Engineering

The Institute of Chemical and Bioengineering Sciences of ETH Zurich invites applications for an assistant professorship in Chemical Systems Engineering.

Candidates should demonstrate exceptional potential to develop an innovative research program in the area of systems engineering and be willing to cooperate within and outside ETH Zurich. The candidate is expected to contribute to the undergraduate and graduate teaching curriculum in chemical engineering.

Assistant professorships have been established to promote the careers of younger scientists. The initial appointment is for four years, with the possibility of renewal for an additional two-year period.

Please submit your application together with a curriculum vitae, a list of publications and ongoing projects, and a research plan to the President of ETH Zurich, Prof. Dr. Ralph Eichler, ETH Zurich, Raemistrasse 101, 8092 Zurich, Switzerland, no later than April 30, 2009. With a view towards increasing the proportion of female professors, ETH Zurich specifically encourages female candidates to apply.
At Monsanto, our talented employees are contributing to our success as a global leader in agriculture. By delivering exceptional results in one of the world’s most important industries, we are creating solutions that improve productivity in farming while reducing the impact on our environment.

SEQUENCING AND BIOINFORMATICS LEAD
We are seeking a highly talented individual to lead and advance our efforts in Sequencing and Bioinformatics.

This position is located in St. Louis, MO and requires a PhD with at least five years post-doc or equivalent experience in Genomics or Molecular Biology and at least three years of management experience.

To view a more complete and detailed job description of this exciting position, please visit our website at www.monsanto.com and to apply online select requisition # mons-00010215. We offer very competitive salaries and an extensive benefits package.

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Imagine your world at Monsanto by visiting us on our website, www.monsanto.com/careers
Monsanto is an equal opportunity employer who values diversity.

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Professor of Bioinorganic Pharmaceuticals
The Faculty of Pharmaceutical Sciences, University of Copenhagen, Denmark, wishes to enhance its profile in bioinorganic chemistry further by allocating a professor position to this field.

The successful applicant is an experimentally oriented scientist who can document a high degree of original scientific production of an international standard in bioinorganic pharmaceuticals and their metabolism. Preference will be given to an applicant with research focus on the use and development of hyphenated analytical chemical techniques for the study of bioinorganic pharmaceuticals or related substances and their metabolism, including structure elucidation of unknown metabolites.

See http://www.farma.ku.dk/job for more.
www.ku.dk

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RUHR-UNIVERSITY BOCHUM

Research School

Germany’s Excellence Initiative

12 PhD Grants

The Research School promotes top-level postgraduate education throughout the Ruhr-University Bochum, offering unique interdisciplinary research opportunities in Germany.

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- special support service for foreign students
- state-of-the-art research facilities
- structured scientific programme
- transdisciplinary Science College
- training of transferable skills
- supervision and mentoring arrangements
- career guidance

Deadline for application is March 31, 2009.
Details on admission procedure can be obtained at www.research-school.rub.de

Two grants are only provided for research projects with direct affinity to the aims of the Alfred Krupp Schüttelabs or neighbouring disciplines (for example educational science).

Civil and Environmental Engineering | Mechanical Engineering | Electronics and Information Technology | Mathematics | Physics and Astronomy | Geosciences | Chemistry and Biochemistry | Biology and Biotechnology | Medicine | Protestant Theology | Catholic Theology | Philosophy and Education | History | Philology | Law | Economics | Social Science | East Asian Studies | Faculty of Sports Science | Faculty of Psychology

The coordination is handled by the Central Coordination Office (CCO) of the Research School. Further details regarding the announcement can be obtained at www.research-school.rub.de
Department of Health and Human Services
Food and Drug Administration/Center for
Biosciences Evaluation and Research
Office of Cellular, Tissue, and Gene Therapies
Director - Division of Human Tissues

The FDA’s Center for Biosciences Evaluation and Research (CBER), Office of Cellular, Tissue and Gene Therapies (OCTGT), Division of Human Tissues (DHT) seeks a supervisory medical officer to serve as director of a multidisciplinary scientific/medical team. The team is responsible for the implementation and integration of the international regulatory and policy development and implementation of regulations related to human cells, tissues, and cellular and tissue-based products (HCT/Ps). The Division has responsibility for regulation of a variety of HCT/Ps such as musculoskeletal, ocular, skin, hematopoietic stem cells and reproductive cells and tissues. The Division also reviews scientific data submitted in investigational new drug (IND) applications and license applications for biological products, as well as applications for medical devices used in the manufacture of HCT/Ps. The Division Director represents the agency as the authority in matters related to human cells and tissues intended for transplantation.

**Qualifications:** Eligible individuals will be U.S. Citizens with an M.D. Doctor of Medicine or Doctor of Osteopathy from a school in the United States or Canada approved by a recognized accrediting body in the year of the applicant’s graduation. A Doctor of Medicine or equivalent degree from a foreign medical school that provided education and medical knowledge substantially equivalent to accredited schools in the United States may be demonstrated by permanent certification by the Educational Commission for Foreign Medical Graduates (ECFMG) (or a fifth pathway certificate for Americans who completed premedical education in the United States and graduate education in a foreign country). The position requires knowledge of advanced medical technologies, practices and techniques as applied to biological product evaluation typified by completion of an approved residency program which may be supplemented by clinical or research experience. Incumbent is board eligible/certified in internal medicine, family practice, pediatrics, pathology, general surgery or a surgical subspecialty, or must have gained and documented progressive experiences equivalent in breadth and intensity to board eligibility. Specialized knowledge of infectious disease or hematology and/or familiarity with FDA regulations is also desirable.

**Salary Range:** Salary is commensurate with education and experience with an excellent benefits package. The candidate may also be eligible for the PHS Commissioned Corps.

**Location:** The DHT offices are located in Rockville, Maryland and new facilities are expected to become available at FDA’s new White Oak Campus in 2012.

**How to Apply:** Submit electronic resume or curriculum vitae with cover letter by April 30, 2009 to: CBER.Employment@fda.hhs.gov. Please reference Job Code: MO-DHT.

For further information please visit our website at http://www.fda.gov/cber/inside/vacancy.htm.

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Tenure-Track Faculty Positions in the Division of Endocrinology, Department of Medicine

Tenure-track positions at the Assistant and Associate Professor levels. The focus of the Division is on Diabetes and its complications. Funded candidates with a molecular and/or clinical approach to diabetes research, emphasis that interfaces clinical/translation initiatives are encouraged to apply. In addition to research, new faculty will instruct fellows and residents, medical and/or graduate students, and will be active in pre- and postdoctoral training. Core facilities available include microarray, imaging (confocal and atomic force), proteomics, cell sorting and analysis, and laser capture microdissection. Interactions with clinical researchers are encouraged through Scott & White and the Central Texas Veterans Health Care System, major teaching hospitals of the Texas A&M Health Science Center. The College of Medicine is undergoing a rapid growth phase with expansion of the medical school class, and a substantial number of new faculty will be recruited in upcoming years. A Diabetes Institute is being established with a strong clinical program at Temple and Round Rock, TX and research base at Temple that includes several clinical trials, epidemiology studies and a pilot program of clinical translation of stem cell therapy in diabetes. Send CV, statement of research, training and teaching goals, and a list of 3 references to: Alejandro Arrolliga, MD, Interim Chairman, Dept. of Medicine, Scott & White, 2401 South 31st, Temple, Texas 76508, arrolliga@swmail.sw.org.

Faculty Positions in the Division of Molecular Cardiology, Department of Medicine

Several tenure-track, State of Texas funded positions at the Assistant and Associate Professor levels are available. Focus of the Division is Cardiovascular, with emphasis on cardiac hypertrophy, remodeling and heart failure. Funded candidates with a molecular approach that interfaces with translational initiatives are encouraged to apply. Competitive startup packages, incentives and lab space are available. Core facilities include microarray, imaging (confocal and atomic force), proteomics, cell sorting and analysis, and laser capture microdissection. The Division, which is part of the Texas A&M College of Medicine, is located in Temple, Texas, a vibrant city close to Austin. In addition to research, new faculty will instruct fellows and residents, medical and/or graduate students, and will be active in pre- and postdoctoral training. Interactions with clinical researchers are encouraged through Scott & White and the Central Texas Veterans Health Care System, major teaching hospitals of the Texas A&M Health Science Center. The College of Medicine is entering a rapid growth phase with expansion of the medical school class, and a substantial number of new faculty will be recruited in upcoming years. Send CV, statement of research, training and teaching goals, and a list of 3 references to: kbaker@medicine.tamhsc.edu or Kenneth M. Baker, M.D., Division of Molecular Cardiology, Texas A&M Health Science Center, College of Medicine, 1901 South First Street, Building 205, Temple, Texas 76504.

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ECOLOGIST
University of Virginia
Blandy Experimental Farm

The University of Virginia’s Blandy Experimental Farm seeks to hire an Ecologist at the RESEARCH ASSISTANT PROFESSOR level. Academic appointment is within the University’s Department of Environmental Sciences, and the position is based at Blandy, an environmental field station located in Virginia’s Shenandoah Valley. The position’s distribution is 50 percent research and 50 percent administration. The successful candidate is expected to establish an extramurally funded research program, attract external funding, supervise graduate students, and mentor undergraduate researchers. Area of research is open but should complement existing strengths at Blandy, and strengthen connections with the Department of Environmental Sciences and Biology. Possibilities include (but are not limited to) invasive species ecology, restoration ecology, landscape ecology, and agroecology. Administrative responsibilities include oversight of Blandy’s undergraduate and graduate research programs, and working with other faculty to make Blandy a leader in environmental research and outreach.

Ph.D. in biology, environmental science, or a closely related discipline is required. Postdoctoral experience is preferred. Applications must provide evidence of high-quality research. For more detailed information about the position refer to: http://www.virginia.edu/blandy/ecologist.htm. This is a non-tenure-track position with an initial three-year contract, renewable pending successful review.

To apply, please complete a Candidate Profile online through Jobs@UVA (website: https://jobs.virginia.edu) and attach a cover letter briefly highlighting your research experience and potential as a research administrator; curriculum vitae; and a statement of research interests. Search for Posting Number 060319S. Please arrange for three letters of recommendation to be sent to Dr. David Carr, Search Committee Chair (e-mail: dcc5z@virginia.edu). Review of applications will begin on March 31, 2009; however, the position will remain open until filled.

Questions regarding the position can be sent to Dr. Carr, and questions regarding the candidate profile process or Jobs@UVA should be directed to Judy Masi (e-mail: jmasi@virginia.edu).

The University of Virginia is an Equal Opportunity/Affirmative Action Employer. Women and members of underrepresented groups are strongly encouraged to apply.

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We seek a CELLULAR IMMUNOLOGIST to investigate molecular and immunological responses elicited by pathogens like *Mycobacterium tuberculosis* and viruses in tissue-engineered alveolar constructs in vitro; in collaboration with VaxDesign Corporation at the Burnett School of Biomedical Sciences, College of Medicine, University of Central Florida, Orlando, Florida. Send curriculum vitae and the contact information of three references by e-mail to P.E. Kolattukudy, e-mail: pk@mail.ucf.edu. The University of Central Florida is an Equal Opportunity, Equal Access, and Affirmative Action Employer. As a member of the Florida State University System, all applications materials and selection procedures are available for public review.

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POSTDOCTORAL FELLOW POSITIONS available to study the molecular mechanisms underlying leukocyte trafficking through three-dimensional extracellular matrix barriers in vitro and in vivo (e.g., Trends in Cell. Biol. 18:560, 2008). Strong background in cell, molecular biology and/or intracellular microscopy will be required. Send curriculum vitae and letters of reference to: Stephen J. Weiss, M.D., Upjohn Professor of Medicine, Life Sciences Institute, University of Michigan, 5000 LSI, 210 Washtenaw, Ann Arbor, MI 48109-0640. The University of Michigan is an Equal Opportunity Employer.
Cedars-Sinai Medical Center

Director of the Center for Experimental Imaging

Cedars-Sinai Medical Center has an exceptional opportunity for an academic leader to head its newly created Center for Experimental Imaging (to be completed in November 2009). This center will be housed in the Davis Research Building, home to the Burns and Allen Research Institute, which includes scientists from a wide range of disciplines. The Director will lead the development of an interdisciplinary research imaging program at the Medical Center. The core facility of the Center will encompass multimodality imaging facilities for both small animal and large animal/human subject research. The small animal core will include optical imaging systems, 9 T MRI/MRS, micro PET, SPECT, and CT systems. The large animal/human subject core will have the latest generation 3T MRI, Dual Source CT and PET/CT systems. The core facilities will be supported by state-of-the-art data management systems.

The various imaging systems will be managed by dedicated scientists and technicians recruited and supervised by the Director. The Director will be expected to establish an independent research program funded by extramural sources as well as to oversee the research imaging core facilities, which embrace collaborative projects involving basic biomedical scientists and clinical investigators. Areas of research strength at Cedars-Sinai include cardiology, skeletal, cancer, gene therapeutics, neuroscience, endocrine-metabolic disease, medical genetics, immunobiology and stem cell science.

Scientific collaborations between the Director’s group and other Cedars-Sinai groups will expand substantially as the program is fully developed and integrated. Other core facilities on campus include microscopy, neurobehavioral, cell sorting, microarray and biostatistics.

The successful candidate will have a distinguished research career as well as experience overseeing a research imaging center. An MD, MD/PhD or PhD will be required. The Director will be eligible to apply for an academic appointment in the Cedars-Sinai professorial series and/or at the David Geffen School of Medicine at the University of California, Los Angeles.

A generous start-up package will be offered for establishment of the Director’s research program and for the infrastructure required to manage the scientific integration of research groups and the core capabilities of the Center.

Qualified applicants should send a cover letter and CV to: Dr. Leon Fine, Chairman of Biomedical Sciences, c/o Carsonp@cshs.org.

Cedars-Sinai encourages and welcomes diversity in the workplace. AA/EOE.

Okinawa Institute of Science and Technology Promotion Corporation

Central Office, Seaside House
7542 Onna, Onna Village, Okinawa Japan 904-0411
Tel: +81 98 966 8711  Fax: +81 98 966 8717
URL: www.oist.jp

Principal Investigator Position in Structural Cell Biology

The Okinawa Institute of Science and Technology (OIST: http://www.oist.jp) is inviting applications for a Principal Investigator position in the field of Cell Biology with emphasis on structural aspects. OIST will open its brand new campus, overlooking tropical beaches in Onna Village, Okinawa, Japan in 2009.

Candidates should have a doctoral degree, a strong publication record, deep practical knowledge in structural cell biology, and fresh ideas. Good communication skills and the ability to work collegially will be required for organizing this new research facility.

Appointment is for five years and is renewable upon successful evaluation. Temporary offices near the new campus will be available until the completion of the new facilities at the end of fiscal year 2009.

For the first round of reviews, candidates should send CV, Five representative papers, statement of on-going and future research intentions, and the names and contact information for five references in electronic format to scb09@oist.jp by April 30, 2009. The search will remain open until the position is filled.
Science Careers is the lens that magnifies opportunities.

Magnifying your opportunities is our main focus. We're your source for connecting with the industry's top employers. We're the experts and primary tool for accessing the latest and most relevant career information across the globe.

Our newly designed website offers improved features that help you magnify career opportunities and your personal potential. Whether you're seeking a new job, career advancement in your chosen field, or ways to stay current on industry trends, Science Careers will broaden your scope for a brighter future.

Improved Website Features:
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» Track Your Activity
» Search by Geography
» Enhanced Job Sorting

Your Future Awaits.

ScienceCareers.org
Abstract Submission
In anticipation of what promises to be a mass gathering and celebration of European basic, translational and clinical studies, we invite the European cancer community to submit abstracts before the regular abstract submission deadline of 29 April 2009.

New Late-Breaking Abstract Policy
To help ensure that the very latest findings are presented for the first time at ECCO 15 – ESMO 34, we are also pleased to report that we have revised our Late-Breaking abstract submission policy and increased the number of proffered paper slots and presidential sessions.

The Call for Late-Breaking abstracts will run from 22 July - 5 August 2009.

More
To view the Advance Programme, consult the abstract submission programme and discover the many reasons for making ECCO 15 – ESMO 34 your must attend meeting this year visit:

www.ecco-org.eu
(select ‘Congresses and conferences’ > ‘ECCO 15 – ESMO 34’).
Early Registration Closes: 31 March 2009.

TO REGISTER ONLINE, VISIT: WWW.KENES.COM/FEMS

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• Opportunities to meet leaders in the field of microbiology, FEMS member societies, European Research Consortia, editorial boards of journals and others
• Young scientists support program that offers travel scholarships and awards

EARLY REGISTRATION DEADLINE: APRIL 27, 2009

KEY AREAS TO BE ADDRESSED
• Biodiversity
• Biofilms in Ecology and Medicine
• Clinical Microbiology and Pathogenesis
• Eukaryotic Microbes
• Marine Microbiology
• Microbial Stress Responses
• Microbes in Alternative Energy Generation
• Molecular Microbiology and Genomics
• Virology
• And Many More
RESEARCH ASSOCIATE or POSTDOCTORAL

CELL BIOLOGIST/BIOCHEMIST to explore functions of the ubiquitin and lysosomal proteolytic pathways: (1) in response to (glyco)oxidative stress upon aging, and (2) roles for K6 on ubiquitin in regulating cell proliferation, differentiation or response to stress. Publications, presentations and guaranteed since the projects are in advanced stages. Experience a major asset. Requirements: (1) Ph.D. in biochemistry or molecular biology; (2) two English language, first authored publications; (3) a two-page proposal describing the project you might like to pursue, focusing on: (a) relationships between carbohydrate, proteolysis, cell viability, or (b) enzymes required to form K6 linkages; (4) curriculum vitae, listing the techniques you know; and (5) a list of science courses and grades you received. Please send all materials to: Allen Taylor Professor of Nutrition, Biochemistry, and Ophthalmology USDAJM Human Nutrition Research Center on Aging Tufts University 711 Washington Street Boston, MA 02111 E-mail: allen.taylor@tufts.edu Laboratory website: http://www.tufts.edu/~ataylor01

INSTRUCTOR

Computational Biology and Semantic Web Neurology Research Department of the Massachusetts General Hospital is recruiting an Instructor with significant expertise in both computational biology and in developing applications for the Semantic Web. Ph.D. in biomedical engineering, mathematics, or bioinformatics, plus several years of experience in industry or academia. Management experience on complex software projects is essential. Solid knowledge of biomedical statistics, genomics technologies, biomedical ontologies, linked data, and information architecture for the web. Tim Clark, Director of Informatics, MassGeneral Institute for Neurodegenerative Disease, 114 16th Street, Charlestown, MA 02129. E-mail: tim.clark@harvard.edu.

RESEARCH ASSISTANT PROFESSOR

Infectious Diseases Louisiana State University Health Sciences Center New Orleans, Louisiana The Department of Medicine, Section of Infectious Disease, is seeking candidates for the position of Assistant Professor for research. Expertise in genomics and microbial genetics is necessary. Experience in the area of intracellular bacteria pathogenesis would be very useful. This is a tenure-track position. E-mail curriculum vitae to e-mail: vprio1@lsuhsc.edu, or mail to: David H. Martin, M.D., Department of Medicine, 538 Bolivar Street, New Orleans, LA 70112. Louisiana State University Health Science Center is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT RESEARCH PROFESSOR, RESEARCH ASSOCIATE, and POSTDOCTORAL ASSOCIATE Cancer Prevention Positions are available for scientists with Ph.D. degree and strong background in biochemistry, molecular/cell biology, or molecular pathology, to study cancer prevention by dietary constituents, synthetic compounds, and combinations of agents. Supported by NIH grants and endowment funds, there are ample opportunities for creative research, multidisciplinary collaborations, and training for career development. Send curriculum vitae, statement of research interests, and the names of three references to Dr. Chang S. Yang at e-mail: cyyang@rci.rutgers.edu. Equal Opportunity Employer.

ASSISTANT PROFESSOR Crop Production Systems Iowa State University Department of Agronomy For application instructions, see website: http://www.iastatejobs.com/applicants/CentralQuickFind?quickFind=76944.

STANFORD UNIVERSITY Department of Anesthesia

The Department of Anesthesia seeks applicants for a faculty position at the junior (ASSISTANT PROFESSOR) or untenured associate professor (UN Tenured ASSOCIATE or FULL PROFESSOR WITH TENURE) level on the University Tenure Line (UTL). The candidate is expected to develop an academic program in clinical systems neuroscience that fits with the Department’s interests in chronic pain mechanisms and treatment. The successful candidate will be responsible for securing government and industry funding to support and conduct innovative research. The overriding requirement for faculty appointment, reappointment, and promotion within the UTL is distinguished performance, or (in the case of junior faculty) the promise of distinguished performance. There should be a major commitment to research and teaching. Interested candidates please submit curriculum vitae to: Dr. Ronald G. Pearl, Chair, Department of Anesthesia, Stanford University School of Medicine, Stanford, CA 94305-5640. Stanford University is an Equal Opportunity Employer and is committed to increasing the diversity of its faculty. It welcomes nominations of and applications from women and members of minority groups, as well as others who would bring additional dimensions to the University’s research, teaching, and clinical missions.

POSTDOCTORAL FELLOW (29UC3623)

The University of Cincinnati is accepting applications for a highly motivated Postdoctoral Fellow to work on a training grant pursuing mechanisms of cardiac protection in isometric/reperfusion injury. The NIH-funded research focuses on understanding NF-kB-dependent transcriptional networks and their downstream effectors in the role of cardiac injury/protection. Techniques include nuclear acid transfection, electrophoretic mobility shift assay (EMSA), Western blotting, immunohistochemistry, quantitative real-time PCR, and echocardiography. Interested applicants with a Ph.D. and experience in molecular biology/chemistry should submit curriculum vitae, statement of interests, and names/contacts of three references by applying at website: http://www.jobsatuc.com. The University of Cincinnati is an Affirmative Action/Equal Opportunity Employer. UC is a smokefree work environment.

STANFORD BIOCHEMISTRY FOUNDERS’ AWARD for DOCTORAL EXCELLENCE We seek nominations for the first annual Stanford Biochemistry Founders’ Award to recognize outstanding achievement by doctoral scholars as part of our commitment to advancing gender diversity in biochemistry and molecular biologies. Recipients will participate in a one-day symposium on May 22, 2009, at Stanford University. The symposium will consist of scientific presentations by the awardees and by Stanford faculty, and informal discussions with students and faculty. Awards will be advanced students near the completion of their studies and will not have graduated before September 1, 2008. Up to six awardees will be selected on the basis of the quality, originality, and significance of their work; the award will include travel and accommodation expenses and a $500 honorarium. Nominations should be submitted electronically (as a single PDF document) by a faculty member, and should include the student’s curriculum vitae, a one-page description of the thesis work (written by the student), and a recommendation letter. A second recommendation letter (PDF) should be sent separately by its author. Nomination materials should state clearly how the nominee’s work has advanced our understanding of the molecular basis of a significant biological process, as well as how this award will help to advance gender diversity in the field. The submission deadline is March 28, 2009, to e-mail: klatta@stanford.edu.

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SEQUENCING BIOINFORMATICS SCIENTIST

The Initiative for Bioinformatics and Evolutionary Studies (IBEST) at the University of Idaho is recruiting a Sequencing Bioinformatics Scientist (Research Scientist 2 rank). The successful candidate for this position will promote and oversee all aspects of the IBEST DNA Sequence Analysis Core Facility. Duties will include advising and collaborating with principle investigators in the development and execution of research initiatives that exploit next generation DNA sequencing technologies. Studies will include applications of genomics, metagenomics, metatranscriptomics, barcoded PCR amplicons, and related efforts. Additional responsibilities include: (1) consult with investigators on aspects of experimental design, library preparation, and DNA sequencing; (2) engage in data analysis including the assessment of data quality and coverage, sequence alignment and annotation, and statistical analyses; (3) supervise technical staff that operate and maintain a GS FLX Titanium series instrument from 454 Life Sciences, and Applied Biosystems 3730 and 3100 DNA Analyzers; and (4) work with the Core Director to develop and execute a business plan to make the facility financially sustainable. For more information and to apply, please visit website: http://www.hr.uidaho.edu.

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