Tenure-Track Assistant Professorship in Chemistry and Chemical Biology
Harvard University
Cambridge, Massachusetts

Candidates are invited to apply for an open-field tenure-track assistant professorship in the Department of Chemistry and Chemical Biology at Harvard University. The appointment is expected to begin on July 1, 2015. The tenure-track professor will be responsible for teaching at the undergraduate and graduate levels. We are seeking candidates who have an outstanding research record and a strong commitment to undergraduate and graduate teaching. Doctorate required by expected start date. Candidates should arrange to have three letters of recommendation sent independently and provide a curriculum vitae, statement of teaching philosophy, list of publications, and outline of their future research plans. All applications and supporting materials must be submitted via the ARoS portal (http://academicpositions.harvard.edu/postings/5829) no later than December 15, 2014.

Harvard is an Equal Opportunity Employer and all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, disability status, protected veteran status, or any other characteristic protected by law.
Biosystems Nanotechnology: Big Opportunities in the Science of the Small

The science of the very small is big business these days, as nanotechnology becomes a huge part of multiple sectors. In particular, scientists, engineers, and clinicians who endeavor to better understand how nanotechnology can impact biological systems—through the use of biosensors, biopharmaceuticals, and biomaterials—are finding abundant opportunities to pursue these investigations in multiple environments. Across the globe, demand is high in biosystems nanotechnology for professionals who speak the language of engineering and biology and have skill sets that include collaborating on diverse teams. By Alaina G. Levine

Chris Skipwith was looking for a way to make his life sciences and physics research more meaningful and move ideas more quickly into therapeutics. With a doctorate in biophysics and experience in pharmaceuticals as a result of a lengthy internship at Merck, he knew that serotonin levels change in patients with thrombosis, which can cause dangerous clots to develop in the bloodstream. Although anti-coagulant medications exist, many of them require regular blood sample collection for monitoring thrombotic risk, and Skipwith saw a problem that he might be able to help solve. He became interested in applying his background in imaging techniques and X-ray crystallography to develop a therapeutic solution that relied on nanotechnology—a real-time biosensor that could continuously and non-invasively monitor someone’s blood serotonin, and help them fight off blood clots even before they form. But before he could attack this problem he knew he needed assistance, as he wasn’t a nanotech expert.

In exploring potential research collaborators, he came across Heather Clark, a professor of pharmaceutical sciences at Northeastern University’s Bouveré College of Health Sciences, who was working on numerous biosensor-related projects at the nanotech scale. Skipwith contacted her with a request for a postdoc appointment and a collaboration was born, as Clark immediately realized the value they both could provide each other. “He taught us techniques in biophysics, and we taught him about nanoscience,” she says. Today, as Clark’s postdoc, he partners with chemists, pharmaceutical scientists, and engineers in her lab as he develops the biosensors.

This research “marriage” is not atypical in biosystems nanotechnology labs: Across academia, government, and industry, groups are almost always interdisciplinary, and new employees—whether they are postdocs or permanent staff—are hired based on how they can holistically contribute to the team, or for specific skills they possess which will complement the group’s expertise.

Biosystems nanotechnology, or nanomedicine, requires diversity amongst its researchers because of its complexity. Medical devices, pharmaceuticals, and sensors can have nanotechnological elements or can be built at the nanoscale themselves. For example, “we’re taking off-the-shelf [medical devices], such as hip implants, which typically have a failure rate after 20 years, and putting nanomaterials on the surface,” explains Tom Webster, chair and professor of chemical engineering at Northeastern University and president-elect of the Society for Biomaterials. This nanofication can decrease inflammation and scar tissue and encourage bone growth. “It’s not changing the chemistry of the implant, but incorporating nanotexturing onto the surface of the device itself.” Scientists see enormous growth potential in adding nanoparticles to stents, orthopedics, catheters, and even dental implants to speed the healing process. “Some people think that nanomedicine is 20 years away, but short-term examples (like medical devices with nanofeatures) are happening now,” he says.

Global contributions

Indeed, “a huge number of innovations associated with problems that nanotechnology can solve are in the healthcare space,” echoes Lloyd Whitman, interim director of the (U.S.) National Nanotechnology Initiative (NNI) coordination office, which manages the activities under the U.S. National Nanotechnology Initiative (NNI). He notes that the largest budget for nanotech projects in the U.S. government currently resides in the NIH, at $441.5 million per year.

In fact, across the world, countries are recognizing the potential of this field to radically change health care. Asia especially is showing growth, as nations such as Singapore, South Korea, Taiwan, Japan, India, and China invest in research in these areas. “A lot of countries are focused on physical science applications to biosystems,” says Saion Sinha, a professor of physics and electrical engineering at the University of New Haven in Connecticut and a researcher in nanomaterials. “There used to be silos where biologists and physicists didn’t talk. But Asian governments are playing a role in building centers that [encourage collaboration].

Upcoming Features

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NANOTECHNOLOGY CAREERS

Proactively reach out to leaders and make yourself, your interests, and skills known, advises Clark.

That’s why Asia is forging ahead [in nanomedicine].” 

Singapore has shown to be a powerhouse of nanotech research as “it is pouring lots of money into recruiting high-level scientists in nanomedicine and nanotechnology,” says Scott McNeil, who heads the U.S. National Cancer Institute’s Nanotechnology Characterization Laboratory (NCL). The nation began ramping up its investments into biomedical research around 2000, notes Chwee Teck Lim, an entrepreneur and provost’s chair professor in the departments of biomedical engineering and mechanical engineering at the National University of Singapore (NUS). “It’s an exciting time in Singapore because the government is making available lots of money to do research and it is also very pro-R&D,” he says. Its National Research Foundation, only eight years old, provides hefty fellowships to young investigators (up to US$3 million), as well as support for technology accelerators and startups. Furthermore, it offers financial incentives for overseas universities to set up shop in the country.

Taiwan is in a current state of enhancing its abilities to contribute to biosystems nanotechnology, says Tao-Shih Hsieh, a distinguished research fellow and director of the Institute of Cellular and Organismic Biology at Academia Sinica in Taipei. “Medical science is the next phase of Taiwanese technology [advancement],” he says. The government is investing in its major universities, and alumni and industry colleagues are actively being recruited back to the nation to participate in research activities associated with this field. “Taiwan is in a position to be much stronger in nanotechnology in the future,” he concludes.

Similarly, Japan seems to be trying hard to expand its reach in biosystems nanotech. The country’s 2006–2010 Science & Technology Plan identified nanotechnology and new materials as part of eight promotion areas and helped establish a new section of Japan’s National Institute of Health Sciences (NIHS) that focuses on nanomedicine. Both the Ministry of Education, Culture, Sports, Science and Technology (MEXT) and the Ministry of Health, Labour and Welfare (MHLW) (which oversees the NIHS) have invested in projects in nanotechnol-

ogy in biological systems. Although experts agree that the country is investing in nanotechnology in general, there is still much to do in terms of solidifying Japan’s reputation as a nanomedicine leader. Toru Maekawa, the director of the Bi-Nano Electronics Research Center at Toyo University, notes that his organization, which was established in 1996, has received MEXT funding, but the strongest government support is still in traditional research areas and not frontier science like biosystems nanotechnology. “I hope Japan will be very good at nanomedicine in the future,” he says.

China is in a growth spurt. Yuliang Zhao, deputy director-general of the National Center for Nanosciences and Technology of China, and director of the Chinese Academy of Sciences (CAS) Key Laboratory for Biomedical Effects of Nanomaterials and Nanosafety, sees a number of actions taking place in the nation currently that will impact its prominence in the field of nanomedicine, including “the higher-and-higher-quality academic activities, the long-term governmental investment, the ambitious venture capital, the transformative industry (from labor-intensive to tech-intensive), and the vast needs from a huge population of patients,” he says. “All of these are moving together and their integration will impact and promote the uses of nanotech in biosystems and medical technology in the future.” That being said, he and other experts suggest that China still has a ways to go before it is considered to be a top-tier contributor to this arena on the world stage.

In the European Union, continental programs are pushing to make an impact in nanomedicine. The European Commission is in the process of creating an E.U.-wide nanotech characterization laboratory, similar to the NCL in the United States, says McNeil. The new center will serve small companies and academic labs by not only conducting characterization studies, but also pursuing opportunities for scaling up the technological innovations, the latter of which “is the missing piece in the U.S.,” he says. The latest E.U. research funding framework, Horizon 2020, has provisions that support applied and industry-related investigations, which can include biosystems nanotech.

Sonia Contera, a Spanish physicist who co-directs the Oxford Martin School’s Institute of Nanoscience for Medicine, sees Horizon 2020 as a potential game-changer in the discipline. “Individual country’s governments are not funding individual scientists like they used to, and people like me, who are multidisciplinary, don’t fit with local country funding programs,” she says. “But Horizon 2020 makes it easier to obtain grants and will lead to more technological development,” as it funds research that aligns scientists and engineers with clinicians working at hospitals and in industry.

Group makeup and leadership

One key component of successful medical nanotechnology programs is the diverse makeup of the teams. The U.S. National Cancer Institute (NCI) Alliance for Nanotechnology in Cancer funds nine academic centers that wed nanotechnology and biological systems, and since its beginning, it has mandated that its centers are co-led by physical scientists or engineers and cancer biologists or oncologists. “This dual leadership works quite well because of the sophistication and diversity of expertise needed in the medical nanotech space,” says its director, Piotr Grodzinski.

Beyond the NCI, many programs are collaboratively
process. “Often engineers will come up with an idea that clinicians do not really need,” i.e., they develop a solution looking for a problem, he says. “They need to interact with each other right at the very early stage—that’s the bottom line. It could be the engineer leading the project or the clinician, but either way it’s important to collaborate and get off on the right foot.”

Where the jobs are

Given that nanotechnology experts come from a plethora of fields, their job opportunities are just as varied and rich. In academia, departments such as chemical engineering, materials science, physics, and chemistry are hiring, as are pharmaceutical sciences, medicine, and various life sciences.

In industry, nanotech biosystems investigations may take place in R&D or manufacturing, says Webster. This is the structure found at Johnson & Johnson, says Ibraheem Badejo, a biomaterials scientist with J&J’s Cambridge Innovation Center in Massachusetts, where nanotech experts are found in R&D or in the preclinical/product development side. Physicists and mechanical and chemical engineers tend to start in research, and biologists with nanotechnology experience often start on the preclinical side, he adds.

At Boston Scientific, nanotechnology experts find themselves essentially as consultants for projects throughout the organization, describes Peter Edelman, a biomaterials expert and R&D fellow. His projects range from exploratory research to support and expansion of existing products, but scientists and engineers with nanotechnology knowledge could find themselves in any part of the firm, including product development and manufacturing. As “big pharma is actively seeking out investigations to do reformulations of existing small molecules into nanoparticles,” notes McNeil, there has been an uptick in career opportunities in both big and small firms in this sector, including startups.

Advice for advancement

Webster predicts that as nanotech takes a larger role in medicine, there will be more opportunities available for those who have nanotechnology experience. “All of the exciting research taking place in biomaterials and biopharmaceuticals is at the nanoscale,” he says. “There are [plenty] of opportunities for learning and research—it’s a wonderful [time] to embrace the field.”

So how do you prepare for these openings? “Learn the language and culture of the different fields you can bridge them,” says Whitman. For life scientists, opportunities will be significantly broader as they expand their horizons and hone skills in techniques and tactics employed by engineers and physical scientists. “When scientists are cross-trained in more than one discipline, they become more marketable,” says Grodzinski.

Proactively reach out to leaders and make yourself, your interests, and skills known, advises Clark. And since nanotech is global in it of itself, experience working in other cultures and nations will bolster your resume, says Chen. But perhaps most importantly, keep nurturing your inquisitive nature. As Whitman encourages his protégés to ask themselves: “Where are the questions that haven’t been answered?”

Alaina G. Levine is a science and careers writer based in Tucson, AZ. DOI: 10.1126/science.opms.r1400149
The Erik Jonsson School of Engineering and Computer Science at the University of Texas at Dallas (UTD) invites applications for two endowed chair positions at the Full Professor level in Bioengineering and/or Biomedical Engineering. Candidates from related disciplines, such as Electrical Engineering, Mechanical Engineering, Computer Science, or Materials Science, whose research is relevant to Bio/Biomedical Engineering, may also be considered. Successful candidates are expected to be internationally renowned researchers and educators in the field with a strong commitment to building a world-class research program at UTD. Of particular interest are candidates whose research interests span one or more of the following areas: biomedical devices, biomaterials, biomechanics, neural engineering, systems biology, computational biology, imaging, medical robotics, including surgical robots, and neurosciences.

The Department of Bioengineering at UTD currently offers the BS, MS and Ph.D. degrees in Biomedical Engineering. The MS and Ph.D. degree programs are offered jointly with The University of Texas Southwestern Medical Center at Dallas and the University of Texas at Arlington. The close proximity to the Medical School offers outstanding opportunities for collaborative research. In addition, a $108M Bioengineering and Sciences Building is currently under construction and will open on the UTD campus in Fall, 2015. The newly established Texas Biomedical Device Center at UTD offers further opportunities for translational research.

In addition to Bioengineering, the Erik Johnson School is home to the Departments of Electrical Engineering, Computer Science, Mechanical Engineering, Material Science & Engineering, and Systems Engineering, and has interdisciplinary programs in Computer Engineering, Telecommunications Engineering, and Software Engineering.

The University of Texas at Dallas is situated in Richardson, one of the most attractive suburbs of the Dallas metropolitan area with several hundred high-tech companies within a few miles of the campus, including Texas Instruments, Alcon, Abbott, Greatbatch, GE Healthcare, Advanced Arm Dynamics, Stryker, VLSiP, Zyvex, Samsung, BlueCross/BlueShield, Intervoice, Plexon, Raytheon, Lenovo, Ericsson, Hewlett-Packard, Samsung, Fujitsu, Cisco Systems, EDS, and Zyvex. Opportunities for joint university-industry research projects are excellent.

Review of applications will begin immediately and will continue until the positions are filled. Indication of gender and ethnicity for affirmative action statistical purposes is requested as part of the application. For more information contact Dr. Mark W. Spong, Dean of Engineering and Computer Science at mspong@utdallas.edu.

Applicants should provide a single PDF file with the following information: (1) resume, (2) statement of research and teaching interests, and (3) full contact information for four, or more, professional references via the ONLINE APPLICATION FORM available at http://go.utdallas.edu/pcu141029.

The University of Texas at Dallas is an Equal Opportunity/Affirmative Action Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, disability, pregnancy, age, veteran status, genetic information or sexual orientation.
Max Planck Institute for Molecular Physiology

Max Planck Institute for Molecular Physiology in Dortmund announces an independent

Research Group Leader (m/f) position in the area of Synthetic Biology

The Max Planck Institute for Molecular Physiology in Dortmund seeks to appoint a Research Group Leader in the area of Synthetic Biology. The ideal candidate should have a research program that is centred on the reconstruction of self-organising, biochemical systems that mimic morphogenesis of cells. Specifically, projects that centre on membrane-protein interaction are favoured. Applicants are expected to establish an internationally recognized independent research program and are encouraged to collaborate with the groups contributing to the MaxSynBio network, with other groups and Departments at the MPI Dortmund, the TU Dortmund University and the Chemical Genomics Centre in Dortmund.

The candidate should hold an advanced degree in either physics, biophysics, chemistry, biology or a related discipline and have at least two years post-doctoral experience. The contract is for a Research Group Leader position at the Assistant Professor level and limited to 5 years with the possibility of extension after successful evaluation and considering labour law-related and financial requirements. The support includes average salary group up to E15 or W2, where appropriate, based on the German Federal Salary Scale, as well as support for an independent group (consumables and staff).

The Max Planck Institute for Molecular Physiology is committed to research on how complex, systemic properties at a higher scale emerge from the dynamics of local interactions of molecular components in living systems. The four existing Departments develop and use various approaches to address fundamental questions arising on the different scales of biological systems – from molecules to cells and tissues.

The Max Planck Society is committed to increasing the number of individuals with disabilities in its workforce and therefore encourages applications from such qualified individuals.

The Max Planck Society seeks to increase the number of women in those areas where they are underrepresented and therefore explicitly encourages women to apply.

Applications, including curriculum vitae, list of publications, and an outline of previous (1 page) and future research objectives (2 pages) as well as names of referees should be sent electronically as one file by December 15th, 2014 to synthbiol@mpi-dortmund.mpg.de.

Short-listed candidates will be invited to a one-day symposium, at which they will have the opportunity to present their research. Date and place of the one-day symposium: February 5th, 2015, Max Planck Institute for Molecular Physiology, Dortmund, Germany. For further information please contact: synthbiol@mpi-dortmund.mpg.de

Assistant/Associate Professor

Laboratory Investigator: Ovarian Cancer

The Department of Medical Oncology at the Dana-Farber Cancer Institute (DFCI), the Gynecologic Oncology Program of the Susan F. Smith Center for Women’s Cancers, and the Brigham and Women’s Hospital, invite applications for a full-time appointment at the Assistant or Associate Professor level. This individual will develop an independent laboratory-based translational research program focused on ovarian cancer. The research program will interface directly with the translational and clinical research efforts within the Gynecologic Oncology program at DFCI as well as other laboratories at DFCI. Candidates with interests in the genomic basis of ovarian cancer, ovarian cancer biology, and/or immunology as well as research engaged in pre-clinical development of new therapeutic approaches are especially encouraged to apply. The candidate must have an MD and/or PhD and a proven track record of outstanding laboratory research.

The candidate will work principally at the Dana-Farber Cancer Institute and the Brigham and Women’s Hospital. Appointment as Assistant or Associate Professor at the Harvard Medical School will be commensurate with experience, training and achievements. Salary and benefits will be competitive with other institutions. Candidates should be board certified or board eligible in Medical Oncology and Internal Medicine. Dana-Farber Cancer Institute is an NCI-designated Comprehensive Cancer Center. Interested candidates must submit a curriculum vitae, a research plan and 3 letters of reference to: Ursula Matulonis, M.D., Director, Gynecologic Oncology Program, Dana-Farber Cancer Institute, 450 Brookline Avenue, Boston, MA 02215.

Please send submissions via email to: umatulonis@partners.org.

Assistant Professor

Departments of Cancer Biology

Dana-Farber Cancer Institute and

Cell Biology

Harvard Medical School

The Departments of Cancer Biology at the Dana-Farber Cancer Institute and Cell Biology at Harvard Medical School invite applicants for a tenure-track faculty position at the rank of Assistant Professor or Associate Professor. We are seeking individuals with a demonstrated potential for imaginative research and who propose to work on exciting problems in any area of Molecular Metabolism. We are especially interested in candidates who utilize metabolomics, proteomics or both to uncover novel metabolic pathways in health and diseased states. The successful candidate will be expected to direct innovative and independent research and participate in the teaching of graduate and/or medical students. Our highly interactive environment provides the opportunity to engage and collaborate with other dedicated researchers both within the Division of Metabolism and Chronic Disease of the Cancer Biology Department (chaired by Bruce Spiegelman) and throughout the diverse Harvard research community. Significant scholarly and scientific resources will be made available for this appointment. Applicants will be housed in new space at the Dana-Farber Cancer Institute. For further information about our Department, please see our web page: http://www.dana-farber.org/Research/Departments-and-Centers/Department-of-Cancer-Biology.aspx

Applicants should submit electronic copies of their curriculum vitae, a description of research accomplishments and future research interests (three pages maximum), and ask at least three references to provide letters of recommendation. These materials should be submitted using the following link: https://academicpositions.harvard.edu/postings/5815. Please contact Kim Wilkinson (Kim_Wilkinson@dfci.harvard.edu) with any questions regarding submission of documents.

Applications must be received by: February 28, 2015.

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Online @ sciencecareers.org

Florida State University
Strategic Faculty Recruitment in Energy & Materials: Materials Characterization and Energy Devices

Florida State University is continuing its interdisciplinary faculty hiring initiative in Energy & Materials. During the 2014-15 academic year the University seeks to recruit several established, mid-career faculty members with the equivalent experience and accomplishments of Associate Professors. We invite applications from researchers who develop and utilize advanced methods for fundamental materials characterization as well as those who work in the area of design, prototyping and fabrication of novel energy devices. Academic department of appointment is open. These are nine month, tenured/tenure-track faculty positions. Successful candidates are expected to have a synergistic impact on existing research programs in the University’s departments and interdisciplinary centers, to contribute to scientific leadership in the growing materials community and to participate in teaching and mentoring at the undergraduate and graduate levels. Successful candidates will be offered a highly competitive salary and start-up package, high quality research space and access to state-of-the-art instrumentation, computing and facilities in academic and interdisciplinary units. Related strengths at Florida State University include departments in the College of Arts & Sciences and the College of Engineering. Complementing these programs are interactive centers including the National High Magnetic Field Laboratory, the Applied Superconductivity Center, the High Performance Materials Institute, the Aero-Propulsion, Mechatronics & Energy Center, and the Center for Advanced Power Systems. Linking these colleges and centers is a new Ph.D. program in Materials Science & Engineering (http://www.materials.fsu.edu/) complementing robust department-based doctoral programs in materials and related areas.

Applicants are asked to provide a single document in PDF format containing a letter of application, a curriculum vitae, a two page narrative describing their research interests and plans, and a brief teaching statement. Applications must be sent electronically to materials2014.search@fsu.edu. Highly ranked applicants will be contacted at a later date for the purpose of requesting letters of recommendation. Review of applications will begin January 2, 2015 and will continue until the positions are filled.

Florida State University is committed to the diversity of its faculty, staff, and students, and to sustaining a work and learning environment that is inclusive. Women, minorities, and people with disabilities are encouraged to apply. FSU is an Equal Opportunity/Affirmative Action Employer.

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With 44 tenure-track hires since 2011, 8 federally-funded research centers, and a bioengineering department established in 2013, Northeastern’s College of Engineering is in a period of dynamic growth. Our emphasis on interdisciplinary, use-inspired research—tied to Northeastern’s unique history of industry collaboration via the university’s signature cooperative education program—enables partnerships with academic institutions, medical research centers, and companies near our centrally located Boston campus and around the globe.

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Successful applicants will lead internationally recognized research programs aligned with one or more of the college’s strategic research initiatives. Particular consideration will be given to candidates at the associate or full professor level; exceptional candidates at the assistant professor level will also be considered.

Learn more and apply at coe.neu.edu/faculty/positions

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GROUP LEADER POSITION

in plant non-coding RNA biology
Strasbourg, France

A position for a group leader in the field of non-coding RNA biology in plants is opened at IBMP (Institut de Biologie Moléculaire des Plantes), Strasbourg, France. IBMP is a leading plant biology research institute and provides a creative, stimulating and international environment with staffed core facilities (http://ibmp.u-strasbg.fr).

The group leader position is opened in the frame of the NetRNA Laboratory of Excellence (LabEx) (http://labex-ibmc.u-strasbg.fr/NetRNA/), a consortium of eleven teams from two nearby institutes (IBMP and IBMC). The general objective of the NetRNA consortium is to advance knowledge on functions of regulatory RNAs, including noncoding RNAs (ncRNAs), and their mechanism of action in a variety of pathogens (bacteria, viruses, parasites) and their hosts, including plants, insects, and mammals.

Current RNA-based research at the IBMP focuses on RNA Quality control (RQC) and the mechanisms and roles of small RNA-mediated silencing, as well as post-translational regulations of the silencing machineries. Applications should ideally cover a new topic and/or make use of alternative model systems than Arabidopsis thaliana, including single cell organisms (e.g. Chlamydomonas).

The offer includes lab space for 6-8 persons, access to common equipment and on-site facilities and core funding of 550k€ over a three year period covering salaries and consumables. Candidates should have an internationally competitive publication record. Applicants should send a CV with a list of publications, a 3-4 page synopsis summarizing accomplishments and future research plans, names and contacts of at least three academic references to ibmp-calinetrna@unistra.fr.

WASCAL, the West African Science Service Centre on Climate Change and Adapted Land Use, is a research and education-focused inter-governmental institute designed to help tackle the climate change challenge and thereby enhance the resilience of human environmental systems. WASCAL operates a Competence Center (CC) in Ouagadougou, Burkina Faso, for its climate research activities. WASCAL is seeking to fill the position of a Senior Data Manager to be based at its CC.

The successful applicant will supervise the operation of the data infrastructure at the CC, which manages heterogeneous research data sets, and co-ordinate its further development. He/she will act as the primary contact person for the scientific staff with regard to all data management issues at the CC. Major responsibilities of the position are the provision of senior professional leadership to IT systems, including data management software, and the development of concepts and data management plans for system extensions in terms of software architecture and user interface design according to changing demands of research carried out in the framework of WASCAL.

The applicant should have a PhD in (geo-)informatics/computer science, or in another field closely related to management of research data, together with sound experiences (minimum 5 years) with data management systems operating on distributed data infrastructures. He/she has good knowledge on database modeling and management and as well as on the concepts and standards used in Spatial Data Infrastructures (OGC web-services). Excellent communication and team leadership skills with excellent English and basic French speaking and writing are expected. This is an international staff position based in Ouagadougou, Burkina Faso, and requires to travel within the WASCAL region and to Germany.

Detailed job description and application procedure at: https://igc4wascal.igc.kfa-juelich.de/downloads/vacancy-senior-data-manager-2014/view (download the PDF)
Professor (all levels) in Metabolic Engineering

King Abdullah University of Science and Technology (KAUST) (http://www.kaust.edu.sa) is seeking a highly motivated and skilled faculty member whose research focuses on metabolic pathway design, optimization, simulation, and engineering aimed at industrial biotechnology applications.

KAUST is an international, graduate-level research university dedicated to advancing science and technology through interdisciplinary research, education, and innovation. Located on the shores of the Red Sea in Saudi Arabia, KAUST offers superb research facilities, generous assured research funding, and internationally competitive salaries, attracting top international faculty, scientists, engineers, and students to conduct fundamental and goal-oriented research to address the world's pressing scientific and technological challenges in the areas of food, water, energy, and the environment.

The successful applicant is expected to develop strong research in computational design and optimization of metabolic pathways. This research will be complemented by extensive experimental research for the validation of computational designs. The faculty member is also expected to establish an experimental laboratory. The faculty member will be part of the Computational Bioscience Research Center (CBRC) within the Computer, Electrical and Mathematical Sciences and Engineering (CEMSE) Division. The position will remain open until filled.

Requirements:

PhD or equivalent in a relevant discipline. Candidates should be well-established within the research field. They should demonstrate original research and experience at the highest international level.

Responsibilities and tasks:

Research competence in the following areas is preferred:

- Computational design, optimization, and simulation of metabolic pathways for the bio-production of important chemicals
- Bioinformatics analysis of transcriptomic and metabolomic data for improvement of host organisms used for the production of biochemicals
- Novel high throughput computational or experimental tools for the optimization of metabolic pathways for production of biochemicals at high yield.

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Every month, over 400,000 students and scientists visit ScienceCareers.org in search of the information, advice, and opportunities they need to take the next step in their careers.

A complete career resource, free to the public, *Science Careers* offers a suite of tools and services developed specifically for scientists. With hundreds of career development articles, webinars and downloadable booklets filled with practical advice, a community forum providing answers to career questions, and thousands of job listings in academia, government, and industry, *Science Careers* has helped countless individuals prepare themselves for successful careers.

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Qingdao Technological University
Recruits for High-end Talents

Qingdao Technological University is a university includes Science, Engineering, Economics, Management, Literary, Law and Arts. Particularly at Science and Engineering, Civil Construction, Machine Manufacturing, and Environmental Energy.

Enjoying a 60 years history, the university builds a higher education system with undergraduates, masters and doctors. The university now has three campuses: Shihai, Huangdao, and Feixian, which accommodates 19 academic schools, 59 undergraduate programs, 18 level-1 disciplines offering master’s degree programs, 1 first-level discipline offering doctoral degree programs, 7 second-level disciplines offering doctoral degree programs, 2 first-level discipline post-doctor research stations, and 25 provincial key disciplines, key labs and engineering technical research centers. Now the University has 22,15 faculty and staff members, and over thirty thousand students. In accordance with the university development, now we are recruiting high-end talents globally.

Disciplines


Requirements

Applicants should have doctorate, also hold the position of assistant professor, associate professor, and professor at leading universities or research institutions overseas. Professionals and talent management at well-known enterprise or financing institution would be acceptable as well.

Contact Information

For more information, please check on our main site: http://www.qut.edu.cn
Tel: +86-0532-85071322
E-mail: qdlgrs@163.com

Southwest Jiaotong University, P.R.China Anticipates Your Working Application

Southwest Jiaotong University (SWJTU), founded in 1896, situates itself in Chengdu, the provincial capital of Sichuan. It is a national key university and "211" and "985" Project university directly under the jurisdiction of the Ministry of Education, featuring engineering and a comprehensive range of study programs and research disciplines spreading across more than 20 faculties and institutes/centers. Boasting a complete Bachelor-Master-Doctor education system with more than 2,350 members of academic staff, our school also owns 2 first-level national key disciplines, 2 supplementary first-level national key disciplines (in their establishment), 15 first-level doctoral programs, 43 first-level master programs, 7 key undergraduate programs, 10 post-doctor stations and more than 40 key laboratories at national and provincial levels.

Our university is currently implementing the strategy of “developing and strengthening the university by introducing and cultivating talents”. Therefore, we sincerely look forward to your working application.

More information available at http://www.swjtu.edu.cn/

Faculty Positions Available in Jinan University, Guangzhou, South China

School of Medicine, Jinan University, is to become a world-class medical school. Now we are searching Senior Scientists (full professor or associate professor) for the Department of Anatomy, the Department of Physiology, the Department of Pathology, the Department of Public Health, the Department of Nursing, the Department of Dentistry and so on.

Applicants should:

* have a doctoral degree in the relevant research field, and a proven record of research excellence;
* have team work spirits and coordination skills, leadership ability;
* top-priority will be given to candidates hold a professorship/associate professorship in a renowned overseas university (or research institutes).

For more information, please visit our website:
http://www.jnu.edu.cn

Faculty Positions Available in School of Optoelectronic Engineering, Jinan University

University fellowship is available. We seek highly motivated young researchers with solid strength in the photonics research areas, especially in ultrafast laser optics or novel optical fiber lasers. Fellowship candidates should possess an earned Ph.D degree in physical science, or optical science or engineering. Candidates under 35 years old and with degree from world-famous universities are preferred. Excellent English writing and oral communication skills are required. The fellowship positions are in the following areas:

1. Ultrafast laser optics

An essential research objective in our group is focused on making high power femtosecond laser with novel laser crystals and laser design. We seek researchers with strong experimental expertise and theoretical knowledge in the ultrafast laser optics, in particular femtosecond laser design and nonlinear optics.

2. Optical fiber lasers

We aim at making optical fiber laser that can produce either high power femtosecond pulses, as well as short cavity fiber lasers using novel specialty optical fibers. We seek candidates with strong experience in fiber optics and laser physics.

Applicants should send a full CV via email to:
Ms. Emily Huang
(E-mail: thym@jnu.edu.cn; Tel: +86-20-85220912)
Mr. Huamin Luo
(E-mail: thhm@jnu.edu.cn; Tel: +86-20-85220500)

Mr. Zhenqiang Chen
(E-mail: tzqchen@jnu.edu.cn ; Tel:+86-20-85220484 ext 417)

http://www.swjtj.edu.cn/
The University of Oklahoma invites applications for a tenure-track faculty position in microbiology. The Department of Microbiology and Plant Biology at the University of Oklahoma invites applications for a tenure-track faculty position at the ASSISTANT PROFESSOR level beginning August 2015. A candidate is sought who can bring synergistic strengths in the areas of systems biology, synthetic biology, microbial interactions, microbial physiology, or bioinformatics toward addressing important questions in microbiology. The department has core strengths in the areas of environmental microbiology, biodegradation, and energy, especially as they relate to anaerobic systems. Institutional priorities include research related to water, biotechnology, energy, climate and cancer biology, and the successful candidate will be encouraged to participate in collaborative, cross-disciplinary, and cross-departmental research and initiatives. Candidates must have a Ph.D. in Microbiology or a related discipline, a strong record of research publication, post-doctoral experience, and the ability to develop and maintain an independent, extramurally funded research program. The successful candidate will contribute to departmental teaching and training of undergraduate and graduate students in support of our curricula. Applications should be submitted as a single PDF-format file to e-mail: mphyofacultysearch@ou.edu and should include a current curriculum vitae, up to five representative reprints, and a statement of research plans as well as a statement of teaching interests and philosophy. Three to five letters of reference should be sent directly to the e-mail address above. Review of applications will begin January 1, 2015, and will continue until the position is filled. The University of Oklahoma is an Affirmative Action/Equal Opportunity Employer and encourages diversity in the workplace. Protected veterans and individuals with disabilities are encouraged to apply.

Johns Hopkins University School of Medicine Institute for Cell Engineering

The Institute for Cell Engineering invites applications from outstanding individuals with creative, rigorous, and integrative research approaches to enhance its cell engineering investigational strengths in immunology, stem cell biology, neurosciences, and vascular biology. For additional information about the institute, visit website: http://www.hopkinsmedicine.org/institute_cell_engineering/. Candidates should have an M.D. and/or a Ph.D. degree with appropriate post-doctoral experience and an outstanding publication record. Primary department affiliation will be determined by the applicant’s qualifications and by relevance of the applicant’s research program to departmental initiatives. The successful candidate will have experience in any aspect of stem cell biology or related field. Special attention will be given to investigators in the areas of vascular biology or organogenesis. To apply, submit curriculum vitae, three letters of reference, copies of relevant publications and a concise description of research interests and research plans (up to three pages) to e-mail: icesearch@jhmi.edu to the attention of Ted M. Dawson, Director, Institute for Cell Engineering. Applications will be assessed on an ongoing basis and the deadline for submission is December 15, 2014. The appointment is expected to be made in 2015.

The John Hopkins University School of Medicine is an Affirmative Action/Equal Opportunity Employer that embraces diversity. From technology specialists to patent attorneys to policy advisers, learn more about the types of careers that scientists can pursue and the skills needed in order to succeed in nonresearch careers.

Get your questions answered.
Careers Forum
ScienceCareers.org
Boston, MA

Assistant/Associate Professor - Ecological & Evolutionary Genomics
Northeastern University, Marine Science Center

REQUISITION NUMBER: FTFR000549
DIVISION/COLLEGE: College of Science
FT/PT: Full Time

POSITION SUMMARY: The Department of Marine and Environmental Sciences at Northeastern University, Boston, Massachusetts, invites applications for a tenure-track appointment in Ecological and Evolutionary Genomics. We seek candidates working with non-model organisms (marine or terrestrial) and using next-generation sequencing techniques to address fundamental questions related to environmental change, particularly in coastal ecosystems. The new hire’s research laboratory will be based at the Marine Science Center in Nahant, Massachusetts and the successful candidate will have the opportunity to make important contributions to the Marine Science Center’s new partnership with the Ocean Genome Legacy.

The anticipated start date will be the fall semester of 2015. A competitive start-up package will be provided.

The successful candidate will be expected to teach at both the undergraduate and graduate level, conduct an independent, externally funded research program, and make strong contributions to the College of Science’s Urban Coastal Sustainability Initiative. The department has 17 full-time faculty members and administers or contributes to undergraduate programs in Environmental Science and Studies, Marine Biology, and Biology. It hosts a Ph.D. program in Ecology, Evolution and Marine Biology, and Masters programs in Marine Biology and Bioinformatics.

QUALIFICATIONS: Applicants must have a Ph.D in Marine Science, Ecology/Evolutionary Biology or a related field prior to the start of the appointment, a strong publication record and evidence of funding success.

ADDITIONAL INFORMATION: Review of applications will begin in the fall of 2014 and will continue until the position is filled. Please contact the Chair of the Search Committee, Professor Geoffrey C. Trussell, at 781-581-7370 (ext. 300) or via email (g.trussell@neu.edu) for questions about the search.

Candida te’s should be prepared to attach their CV, Cover Letter, Research Statement, Teaching Statement and 3 Sample publications and contact information for three references.

How To Apply: To apply, visit Careers at Northeastern at http://aptrkr.com/542130 You may also apply by visiting the College of Science website at http://www.northeastern.edu/cos and clicking the Open Faculty Positions tab.

Northeastern University is an Equal Opportunity, Affirmative Action Educational Institution and Employer, Title IX University.

Learn more and conduct your job search the easy way.

● Search thousands of job postings
● Create job alerts based on your criteria
● Get career advice from our Career Forum experts
● Download career advice articles and webinars
● Complete an individual development plan at “myIDP”

Target your job search using relevant resources on ScienceCareers.org.