Southern Illinois University’s School of Medicine at Springfield invites applications and nominations for the position of Chair of the Department of Medical Microbiology, Immunology and Cell Biology (MMICB) www.siemed.edu/mmicb. The MMICB department has twelve faculty members each with an active research program in areas ranging from virology, neuroscience, reproductive immunology and host response to infection, to a major cancer biology group. The Department has an excellent record of research funding from the NIH, DOD, foundations, and contracts. The Department’s graduate program is part of the integrated Molecular Biology, Microbiology and Biochemistry Program (46 participating faculty members) which is composed of the Departments of MMICB and Biochemistry and Molecular Biology in the School of Medicine and the Department of Microbiology in the SIU College of Science. The program hosts approximately 90 master’s and Ph.D. students of which 40 reside in the MMICB department. The Department occupies 28,000 sq. ft. in new and renovated laboratory space. The Department shares a 2500+ sq.ft. CDC certified BSL3 laboratory with the Illinois Department of Public Health. The Department is supported by excellent Core Research facilities.

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Candidates must possess a Ph.D. and/or an M.D. degree, and have academic credentials for a tenured appointment as Professor.

To apply, please send via e-mail, a letter of application or nomination, with curriculum vitae, statement of research interests and goals as Department Chair and the names of three references in a single PDF to:

Ross D. Silverman, J.D., M.P.H.
Chair, MMICB Search Committee
c/o pamitai@siemed.edu
Southern Illinois University
School of Medicine

Review of applications will begin on May 15, 2012 and continue until the position is filled.
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Cancer Research

Overcoming Challenges
Renewed Focus on Cancer Vaccines

No longer treated as myth, the cancer vaccine field has materialized over the past decade. Researchers have overcome numerous challenges and more vaccines are poised to enter the market. The field is growing rapidly, which makes it an opportune time for graduate and postdoctoral fellows to enter it.

By Jacqueline Ruttimann Oberst

Until recently, Olivia Finn would come across articles or meeting sessions describing her field as “Fact or Fiction.” “It used to drive me crazy,” she says.

Finn, a chair of the Department of Immunology at the University of Pittsburgh, and others who work on cancer vaccines have finally seen their field vindicated. Three vaccines have been approved by the U.S. Food and Drug Administration and five U.S. phase III clinical trials are poised to report data by this year. Worldwide, over a dozen cancer vaccines have been approved.

Cancer vaccines as a field have been slow to emerge but have come into its own. Researchers have learned the reasons, scientific and regulatory, for many past failures and are poised to meet future challenges. Graduate and postdoctoral fellows who choose to enter this field are doing so when it is hitting its stride, allowing the possibility for a rewarding and potentially lucrative career.

FINDING THE PROVERBIAL NEEDLE IN A HAYSTACK: CANCER VACCINE HISTORY

Treating cancer has historically relied on a trifecta of treatments—surgery, chemotherapy, and radiation—known colloquially as “slash, poison, and burn.”

Vaccines have a potential advantage over these three options in that the body’s response is longer lasting (on a scale of years as opposed to weeks or months), which could possibly eradicate the micro-metastases that often linger after standard treatments end. Moreover, cancer vaccines have similar minor side effects to traditional vaccines: inflammation at the injection site and flu-like symptoms.

Some say that this method probably won’t eradicate cancer altogether, but vaccines could enable physicians to manage it more like a chronic disease.

“I anticipate that we’ll get to the point where if you do get cancer, then it will be more manageable or cured more easily,” says Christian Ottensmeier, a medical oncologist and director of the Experimental Cancer Medicine Centre at the University of Southampton in the United Kingdom.

Opines Eric von Hofe, president and CEO of Antigen Express, a cancer vaccine biotechnology company: “We’re not going to replace chemotherapy, radiation, and surgery, but in 5 to 10 years, vaccines will be much more an accepted part of clinical oncology.”

Cancer vaccines require rethinking the term “vaccine.” Most patients are familiar with vaccines given to healthy people to prevent bacterial or viral infections, such as diphtheria and mumps. These traditional vaccines require using weakened or killed viruses, bacteria, or other germs to trigger an immune response in the body via activation of B cells and killer T cells. Although some cancer vaccines (e.g., Gardasil and Cervarix for cervical cancer) work in this fashion and are for prophylactic purposes, others are used as a therapeutic, to retrain the immune system to attack a disease that already exists (e.g., Provenge for prostate cancer). Therapeutic vaccines use cancer cells, parts of cells, or pure antigens—sometimes from the individual patient—in combination with other substances called adjuvants to further boost the immune response. Thus these vaccines all fall under the umbrella of immunotherapy.

The first foray into immunotherapy was in 1893, when William Coley, a New York surgeon, injected a cocktail of attenuated bacteria, Streptococcus pyogenes and Serratia marcescens, into sarcoma patients. Today, this approach is only used in superficial bladder cancers; live Bacillus Calmette-Guérin is injected after surgical resection.

Beginning in the 1970s, the discovery and refinement of techniques to create monoclonal antibodies, which can bind to a single target, has enabled the identification of cancer-specific cell-surface proteins or antigens. Whereas antigens detected by these antibodies offer a whole armamentarium for vaccine creation, most of them are also found in normal cells. This raises the risk of a patient’s immune system turning on itself and creating autoimmunity. Yet all is not lost for this type of treatment: Cancer cells often express more of these antigens than normal cells, and the “friendly fire” or immune-induced injury of normal cells may be reversible. Furthermore, vaccines can elicit antibodies that do not act directly upon the tumor cells; some neutralize growth factors, cytokines, or the blood supply needed by cancer cells to inhibit the tumor’s expansion and growth.

“So much exists that is unknown, and this fact represents a unique opportunity for investigators, especially young scientists, to find a foothold and make very important contributions.”

—Philip Vernon

UPCOMING FEATURES

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Cancer Research

“The development of synthetic vaccines via genetic engineering over the last decade has [also] been a game-changer.”

—Philip Arlen

others target the connective tissue or stroma between tumor cells. The discovery of cancer-testis antigens, whose expression is limited only to cancer cells and immune-protected sperm cells, has opened up new immunotherapy approaches that avoid healthy cells altogether.

The late 1980s and early 1990s ushered in better cell culturing techniques, allowing immune cells, such as killer T cells, to be retrieved from the patients and grown in the lab. In the 1990s and 2000s, the development of spontaneous mouse tumor models closed the loop from bench-to-cage-to-bedside. Instead of using xenographs or transplantable tumors in immunocompromised mice, researchers can now observe tumorigenesis in the context of an intact immune system. These improvements have facilitated better preclinical testing of cancer vaccines and their safety.

“The development of synthetic vaccines via genetic engineering over the last decade has [also] been a game-changer,” says Philip Arlen, president and CEO of Neogenix Oncology, another prominent cancer immunotherapy company. “Previously vaccines came from the tumors themselves. Now we are using peptides and vectors and not introducing biologic material from the tumor itself to humans.”

According to many in the field, it will take a village of researchers to help create these vaccines.

“This is a very active field of translational research requiring clinical investigators as well as scientists in both academia and biotech as it increasingly attracts big pharma attention,” says von Hofe. “At the practical level, biomarker discovery, including gene profiling and the study of immunological parameters, are clearly areas in need of candidates with bioinformatics expertise, as well as a tumor immunology background, to help guide the discovery of second generation cancer immunotherapeutics.”

Finn, whose students are part of an interdisciplinary graduate program at the University of Pittsburgh School of Medicine, admits that she’s “shameless about convincing new students to choose immunology.”

“We teach students the power of the immune system and how the immune system operates. One can’t do anything nowadays that doesn’t involve the immune system. It affects such ailments as obesity and stress,” adds Finn, claiming that as a result, psychology, and bioengineering students have entered the immunology department to work in the cancer vaccine field.

Tumor biologists and immunologists are not the only experts that are required for this field.

“A whole slew of skills are needed,” says Arlen. “There’s the issue of discovery in which tumor biologists and immunologists contribute, but then there’s sequencing of proteins or peptides for which molecular biologists are needed. Virologists and microbiologists can contribute to design of viral vectors, and those with regulatory and peptide synthesis skills are desired for production/manufacturing work.” He adds that individuals with vivarium expertise are also in demand, as various animal models, such as mice, dogs, pigs, and monkeys, are needed for preclinical studies.

STICKING POINTS: CANCER VACCINE CHALLENGES
Over the years, numerous tumor immunotherapies have had “false starts,” with early-stage successes but failing in phase III clinical trials. Many reasons account for these failures, including insufficient knowledge of the biology and inappropriate patient populations.

“The understanding of the immune system 30–35 years ago is archaic compared to what we know today,” says Arlen. “We now have a much more comprehensive understanding of the checks and balances of how the immune system works—the subsets of cells, how they function, and how immunocompetency can be compromised or lead to autoimmunity when the immune system is not in check.”

“Although immunologists are still needed, someone versed in regulatory affairs is also required,” continues Arlen. “We’ll need someone who can go through the IND process, understands the rationale for treating patients, and who has expertise in developing animal studies.” Those who possibly fit the bill include physicians, nurses, and veterinarians.

According to Finn, the earlier clinical trials have taught cancer vaccine researchers two things: “One, there really is no window of opportunity; patients with cancer are already immunocompromised to varying degrees so they might not respond well to a vaccine. Second, we have learned more about the specifics of how a tumor changes the immune system. For example, too many regulatory T cells observed in many cancer patients will prevent an immune response to the vaccine, so we need to get rid of these. Likewise, if there are too many exhausted T cells, we need to help them by interrupting their negative signaling pathways.”

This knowledge has spurred the vaccine field into a new industry: immunotherapeutic antibodies that prime the cancer patient’s immune system so vaccines can work. One example is the emerging class of anti-inhibitory antibodies called checkpoint blockades, such as anti-CTLA-4 and anti-PD-1, which bypass the immune system’s natural off switches, sustaining the cellular immune response long enough to make an impact on cancer. To aid in the construction of these antibodies, biochemists and researchers with expertise in X-ray crystallography are also highly desired.

Clinical trial designs also need revamping in the cancer vaccine field. With traditional drugs, clinical trials tend to include individuals whose cancer is at an advanced stage to prove efficacy. This is often because these patients are more willing to try the treatment. Essentially, they have nothing to lose, having already been treated with other agents that have failed. Moreover, companies have found that treating this population often results in positive effects showing up more quickly than in patients with either early-stage or fully-resected tumors.

However, Ottensmeier says, “cancer vaccines have forced clinical trial design to stand on its head” because clinical trials have indicated that vaccines will likely work best in patients with earlier-stage cancers or in those whose tumor burden has been reduced to the microscopic level by surgery or chemotherapy. continued »
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Requirements: The successful candidate(s) must have a Ph.D., M.D., or M.D./Ph.D. degree, evidence of prior research accomplishments, a minimum of one to two years of postdoctoral training, and excellent interpersonal skills. Emerging faculty are expected to establish a high quality, independent basic/translational or clinical cancer research program having the potential for NIH level grant support within a 2-3 year period and to meet the criteria for appointment as a tenure-track Assistant Professor. Established faculty are expected to bring a well-funded and recognized program in basic/translational or clinical cancer research, exhibit strong leadership potential, and qualifications appropriate for tenured appointment as Associate or Full Professor.

Application Process: Applicants should send letter of interest and CV to Michael R. Boyd, M.D., Ph.D., 1660 Springhill Avenue, Mobile, Alabama 36604, or e-mail to sallen@usouthal.edu.

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Cancer Research

“After decades of using in vitro culture systems and animal models, it is fantastic to now have access to samples from patients that can provide us with truly informative answers. Our findings may indeed improve the treatment or even cure cancer patients one day.”

—Angelica Cazaly

Finn’s lab is testing early intervention in patients with premalignant lesions such as advanced colon polyps. Her group has seen that vaccinating patients who have had these polyps removed elicited a robust immune response never before seen in patients with colon cancer. She hopes that this strong immune response will prevent the polyps from either recurring or reverting to colon cancer.

MAGIC BULLET OR NOT?
Most researchers in the cancer vaccine field believe that because cancers are ever-changing in their nature, adopting a one-size-fits-all approach for cancer vaccines is not likely.

“The future is in two directions: vaccines as one more addition to a very complex and comprehensive therapy for cancer patients, or alone as prophylaxis,” predicts Finn.

Combining vaccines with chemotherapy might prove to be a formidable match.

“There’s a long-held belief that any chemotherapy has a negative impact on the immune system. However, low-dose chemotherapies actually release antigens that trigger cancer-specific immune responses and can give a whole new set of markers to monitor,” says Jill O’Donnell-Tormey, CEO and director of scientific affairs at the Cancer Research Institute, a non-profit organization dedicated to advancing the field of cancer immunology. She adds that there is a need to optimize cancer vaccines (i.e., dosing, timing, alone or in combination, and the identification of prognostic and diagnostic biomarkers that can be modulated by cancer vaccines)—as such, epidemiologists and those studying public health are in high demand in the field.

Arlen points out that the chemotherapy agents may change their spots: Many of the drugs used to damage cancer cells, once thought to be immunosuppressive, appear to have unexpected beneficial effects on the immune system. “When used at a proper dose, [chemotherapy] can reduce or lower regulatory T cells that block tumor response, making the tumor more susceptible to the immune responses generated by cancer vaccines,” he says.

WHY GO INTO THIS FIELD?
For Ottensmeier, a medical oncologist and immunologist, this field has the best of all worlds.

“It’s an interplay of learning in a lab, testing in people, and going back to the lab,” he says. And because patients understand the general concept of vaccines, they also get excited to see their lab results and whether their bodies are fighting the cancer, he adds.

His postdoctoral fellow, Angelica Cazaly, agrees: “After decades of using in vitro culture systems and animal models, it is fantastic to now have access to samples from patients that can provide us with truly informative answers. Our findings may indeed improve the treatment or even cure cancer patients one day.”

The field is also not a fait accompli, yielding more opportunities for students to contribute.

“It’s a great field to enter because of how much we still have to learn about how the immune response to tumors is initiated, the complex interplay of molecules and cells that render it effective, and how it can contract appropriately. Knowledge of all these processes increases the opportunity for therapeutic intervention,” says Adam Farkas, Finn’s graduate student.

Laboratories that focus on cancer vaccines are becoming abundant at university cancer centers and at government facilities such as the National Cancer Institute (NCI) and the National Institutes of Health. There are also positions in the cancer vaccine field for M.D.s. Many U.S. medical oncology training programs provide physicians with either training in the laboratory or developing clinical trials and treating patients with experimental cancer vaccines. Furthermore, now that the industry is focusing on developing these therapies, basic research laboratories in both pharmaceutical and biotechnology companies provide a basis for additional training in this cutting-edge oncology field.

“So much exists that is unknown, and this fact represents a unique opportunity for investigators, especially young scientists, to find a foothold and make very important contributions,” says Philip Vernon, another graduate student in Finn’s NCI-sponsored training program. “This reality allows scientists to pursue their own ideas because of the relative paucity of established ‘dogma.’”

This latitude of scientific exploration, as well as preliminary positive results has steered the field, according to Arlen, from “this is really voodoo’ to now being validated and approved.”

Jacqueline Ruttimann Oberst is a freelance writer living in Chevy Chase, Maryland.

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Research Scientist position in the Division of Hematology Thrombosis, Hemostasis or Vascular Biology with focus on Thrombosis

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Interested candidates are invited to learn more about this position, Mayo Clinic and Rochester at [www.mayoclinic.org/scientist-jobs/](http://www.mayoclinic.org/scientist-jobs/) and reference job posting 9617BR. Applications should include a letter of interest and curriculum vitae. Specific questions related to the posting should be directed to:

**John A. Heit, M.D., Professor of Medicine**

**Division of Cardiovascular Diseases**

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The candidate is expected to establish a vigorous and extramurally funded research program, and participate in collaborative and interdisciplinary projects. Teaching at the graduate level is also expected. Applicants must have a doctoral degree in a relevant area, a minimum of two years of post-doctoral experience, and a strong record of research accomplishments.

The MCW Cancer Center is an integrated partnership of more than 200 cancer research scientists and physicians at the Medical College of Wisconsin, Froedtert Hospital, Children’s Hospital of Wisconsin, Clement Zablocki VA Medical Center, and the BloodCenter of Wisconsin. The MCW Cancer Center occupies 30,000 sq. ft. with newly completed space dedicated to cancer-related basic science research on the MCW campus, and an additional 50,000 sq. ft. of space adjacent to Froedtert Hospital in the MCW medical complex.

Candidates should send by e-mail (kedwards@mcw.edu) a complete curriculum vitae, bibliography, statement of research interests, and names of at least three references to: Kate Edwards, Cancer Cell Biology Search, Medical College of Wisconsin Cancer Center, 8701 Watertown Plank Road, Milwaukee, WI 53226.

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**Faculty Position**

- **Leon H. Charney Division of Cardiology** - [http://medicine.med.nyu.edu/cardiology/](http://medicine.med.nyu.edu/cardiology/)
- **Kimmel Center for Stem Cell Biology** - [www.kimmelstem.med.nyu.edu](http://www.kimmelstem.med.nyu.edu)

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This is an electronic application process only. Please create your application packet by formatting it as a single PDF document. Use the following page order: 1) Cover Letter; 2) Curriculum Vitae; 3) Research Statement, highlighting the most significant research accomplishments and the relevant publications. Email the application packet to [stemcellsearch@med.nyu.edu](mailto:stemcellsearch@med.nyu.edu) by April 30, 2012. Three letters of reference should be sent independently to the same email address. NYU Langone Medical Center was founded in 1841 and is an equal opportunity affirmative action employer. Women and minority candidates are encouraged to apply.
The University of Minnesota Medical School seeks applications from exceptional scientists and academic leaders for the position of Head of the Department of Pharmacology. The successful candidate will be responsible for the functions of the Department that include its research, educational, and service activities that support the mission of the Medical School and University. As Head of the Department, the successful candidate will also have the opportunity to recruit outstanding faculty in basic and translational aspects of pharmacology and to develop collaborations and connections to other Departments, Institutes and Centers across the Academic Health Center. The Department Head will report to the Dean of the Medical School.

All candidates must have a PhD and/or MD degree and qualify for appointment as a tenured professor of the University. Candidates will have an internationally recognized research program and strong record of extramural support. The candidate must also have an outstanding record of academic leadership as well as excellent interpersonal, team building and communications skills. Candidates must have a strong commitment to graduate, undergraduate and professional medical education and be dedicated to enhancing and supporting diversity within the Department. For details about the Department please consult: http://www.pharmacology.med.umn.edu/.

Please apply online at employment.umn.edu/applicants/Central?quickFind=101682. Please attach a cover letter, curriculum vitae and statement (1-page) on academic leadership and its role in public higher education. For questions please contact Ms. Jennifer Skar (skar0049@umn.edu).

Applications will be reviewed continuously until the position is filled.

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Qualified applicants are invited to submit a letter of application, which should outline their interest in the position and a description of research interests and future research plans (3-5 pages), along with their curriculum vitae to:

**Contact person for PI positions:** Ms. Fangmin Li (gsmkyb@pku.edu.cn) For Postdoc positions: Ms. Siyuan Gong (clsbsh@ctb.pku.edu.cn)

Applications may be submitted until June 30, 2012. Please note that, due to the high volume of applications, only short-listed candidates will be contacted.

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**Faculty and Postdoctoral Positions at Center for Life Sciences**

Applications are invited for Principal Investigator (PI) and Postdoctoral positions at Center for Life Sciences ([http://www.cls.edu.cn/english/](http://www.cls.edu.cn/english/)).

As a pilot program of the National Plan for Education Development and Reform, Center for Life Sciences aims to combine excellence in research and education. We are recruiting scientists with the best potential to carry out creative research of long-term significance in the life sciences. Positions are open at all ranks from Assistant, Associate, Full Investigatorship, to Postdoctoral positions.

The Center of Life Sciences, Peking University side is looking for the best researchers in life sciences regardless of specific areas of research, although our relative emphasis will be in bioinformatics, cancer researches, epigenetics, cell biology, chemical biology, computational biology, human genetics, genetics, genomics, molecular medicine, molecular neuroscience and cognitive neuroscience, modern imaging, physiology, plant biology, synthetic biology, and systems biology.

Each PI holds a joint appointment in one of the departments or schools at Tsinghua University (such as Chemistry, Computer Science, Engineering, Life Sciences, Mathematics, Medical School, Physics and Psychology) where the PI will hold a tenure track or tenured position. **Contact person for PI positions:** Ms. Jiang Yi (yijiang@biomed.tsinghua.edu.cn) For Postdoc positions: Ms. Hong Zhang (zhanghong@biomed.tsinghua.edu.cn)

Center of Life Sciences offers a stimulating and interdisciplinary research environment, outstanding core research facilities, and internationally competitive packages for both PI and postdoctoral researchers. Award-winning kindergartens and exceptional elementary schools will be available to the children of all PIs and postdocs. Applications from both Chinese and non-Chinese nationals will be evaluated on an equal opportunity basis.

Please send your application materials (a cover letter, a CV, a brief summary of past research accomplishments, and a brief description of your future research plan) in a single PDF file to the contact person. For postdoc applicants, please indicate in your cover letter 1 or 2 laboratories as your intended host. The research areas of all PIs can be found at [http://www.cls.edu.cn/english/PrincipalInvestigator/](http://www.cls.edu.cn/english/PrincipalInvestigator/).
Government
Chief Scientific Adviser

The Government Chief Scientific Adviser (GC SA) is the principal source of guidance and counsel to the Prime Minister and wider government on science. She provides clear and authoritative analysis of some of the most important challenges the country faces. The GC SA must comment on a very wide range of scientific matters. In addition, it is also the role of the GC SA to articulate measured and comprehensible messages to the general public, often in times of crisis.

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The Cabinet Office has retained Russell Reynolds Associates to assist with this appointment.

For further information on the position, additional details on qualifications, requirements, terms and conditions of service and application instructions, please visit: www.rrapublicsector.com

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The University of Nebraska-Lincoln invites applications for the position of Professor and Chair, Department of Statistics. This is a full-time, 12-month appointment responsible for the academic leadership of the research, teaching and service activities in the Department of Statistics as well as for the professional development of the faculty and staff. In this position, you will have a primary focus on the continued development of the Department as an internationally recognized program in statistics along with the opportunity and expectation for developing a high level, internationally recognized campus-wide bioinformatics and computational biology initiative. The Department Chair reports to the Dean of the College of Arts and Sciences (CAS), and deans of the College of Agricultural Sciences and Natural Resources (CASNR) and the Agricultural Research Division (ARD) within the Institute of Agriculture and Natural Resources (I ANR) on matters related to the department.

To succeed in this role, you will need an earned doctoral degree in Statistics or closely related field; must meet qualifications for appointment as a tenured professor; and have a record of excellent interpersonal, organizational, and leadership skills. Previous administrative experience is preferred.

If this sounds like the job for you, please access the web site http://employment.unl.edu. Search for requisition number 120174. Complete the faculty academic administrative information form. Attach a letter of application, curriculum vitae, and contact information for three professional references.

Review of applications will begin May 15, 2012, and will continue until the position is filled or the search is closed.

The University of Nebraska has an active National Science Foundation ADVANCE gender equity program, and is committed to a pluralistic campus community through affirmative action, equal opportunity, and dual careers.

Full-time Associate Professor or Full Professor

The Model Animal Research Center (MAR C) of Nanjing University invites applications for full-time faculty positions, at academic ranks of Associate or Full Professor. Individuals with demonstrated accomplishments in, but not limited to, the following areas are encouraged to apply—neurobiology, immunology, development biology, metabolic disease and cancer biology. Highly competitive research support will be provided in an interactive and nurturing environment. Individuals will have an opportunity to establish a state-of-the-art independent research program in newly renovated space and to interact with a strong group of affiliated scientists. For more information and to apply visit website: http://www.nicemice.cn/.

Our institute’s research interests emphasize on programs in the studies on human diseases using different model animal systems such as mouse, zebrafish, fruit fly, and nematode worm. Now MAR C has established an excellent platform for functional analysis of transgenic and knockout mice, with AAALAC accredited SPF animal facility with more than 50,000 mouse cages. Interested individuals, regardless of their nationalities, should submit a detailed letter of interest, curriculum vitae, PDFs of three of their best publications, and three letters of recommendation to: Ruimin Zhu, HR supervisor of Model Animal Research Center, Nanjing University, 12 Xuefu Road, Nanjing, Jiangsu 210061, China or preferably electronically to syxzrm@sina.com or zhurm@nicemice.cn. The positions are available immediately. Applications will be evaluated by faculty search committee upon receipt until the positions are filled.

Korea University, in Seoul, South Korea, seeks candidates to join the faculty in the fall semester of 2012 beginning September 1. We are recruiting enthusiastic, well-trained scholars who wish to refine their teaching experience and research in this part of the world. Korea University, founded in 1905, is ranked one of the top universities in Korea by major global assessment reports.

The positions available for the candidates are assistant, associate, or full professors (a two or three year tenure track appointment, OR non-tenure track appointment). All candidates are expected to have ample university-level teaching experience, a strong commitment to excellence in scholarship, and dedication to teaching and research in their fields.

[Education Requirement] - Ph. D. at the Time of Application

[Online Application] - How to apply : http://kuweb.korea.ac.kr/faculty
- Application Deadline : April 25, 2012

[Point of Contact] - Phone : +82-2-3290-1073
- Fax : +82-2-929-9164
- E-mail : faculty@korea.ac.kr
Assistant/Associate Professor of Plant Breeding & Genetics (Tenure Track)

Molecular Breeding & Genetics for Nutritional Quality - Research 60%; Teaching 40%

Dept. of Plant Breeding & Genetics - NY State College of Agriculture & Life Sciences - Cornell University - Ithaca, NY

Great universities depend on the talents of great people. Cornell University fosters the pursuit of knowledge and inspires excellence. Join our global community that teaches tomorrow’s thought leaders to think otherwise.

Responsibilities: Advances in biochemistry, metabolomics, and metabolic engineering, and the availability of genomic sequences for crop plant species are opening new and valuable research opportunities for plant breeding. This molecular breeding position will have responsibility for conducting innovative research exploring genetic/epigenetic/quantitative variation in plants and the association with phenotypic variation in traits relating to human and animal health and nutrition made accessible by the latest technologies. These efforts could be applied to traditional or specialty crops chosen specifically for their unique attributes. The range of possible outcomes would span foods with new nutritional and health-promoting functions or bioavailability, to the chemistry of flavors and texture to new bioactive food components. Because this is part of a cluster hire, preference will be given to candidates interested in forming collaborations with other faculty with complementary expertise in nutritional sciences, food science, and animal science, among others. Appointee will be expected to develop an externally funded research program; release novel lines, germplasm or genetic stocks; supervise graduate students; teach courses at both the undergraduate and graduate levels related to plant breeding, plant genetics and genomics; and contribute to specialized courses, seminars, and team-taught courses, as well as to graduate training in plant breeding/plant genetics/genomics/plant molecular biology. We are seeking highly motivated individuals with strong research and teaching credentials. Strength in quantitative genetics/statistics is highly desirable. This position will have a 60:40 research and teaching responsibility. For more information visit our web site http://pibrgen.cals.cornell.edu.

Qualifications:
- Ph.D. in plant breeding, plant genetics/genomics, or plant molecular biology
- Experience in teaching, student advising, and research related to this position, either post-doctoral or pre-doctoral
- Evidence of ability to work with other researchers in interdisciplinary inquiry
- Evidence of ability to attract extramural support and lead an innovative research/breeding program
- Postdoctoral and/or other relevant experience desirable

Salary: Competitive and commensurate with background and experience. An attractive fringe benefits package is available.

Applications: Candidates are requested to submit a letter of application; detailed resume; a personal statement of research and teaching experience, leadership efforts, and contribution to diversity; copies of university transcripts; copies of one or two publications; and names and contact information for three referees combined into a single file in pdf format. Send by e-mail to Mark Soran (md464@cornell.edu) or by mail to Department of Plant Breeding and Genetics, 240 Emerson Hall, Cornell University, Ithaca, NY 14853. Applications are reviewed as received and will continue until a suitable applicant is identified. Inquiries may be sent to Mark Soran, 240 Emerson Hall, Cornell University, Ithaca, NY.

Find us online at http://ht.cornell.edu/jobs or Facebook.com/CornellCareers

Cornell University is an Affirmative Action Equal Opportunity Employer and Educator
The Department of Pharmaceutical Sciences in the College of Pharmacy at the University of Tennessee Health Science Center in Memphis, Tennessee, is seeking applications for a 12-month full-time, tenure-track faculty position at the FULL, ASSOCIATE, or ASSISTANT PROFESSOR level that is state supported. The successful candidate is expected to devote greater than a 60% effort to research. The applicant should have core expertise in medicinal chemistry, pharmacology, pharmaceutics, chemical biology, biomedical engineering, structural biology, or a related multidisciplinary discipline focused on drug discovery and development. Candidates with a well-funded program in cancer, diabetes, antibiotics, drug delivery, nano-medicine, nano-technology, bio-imaging, or other research that is highly encouraged to apply. The successful candidate is expected to have a Ph.D. or equivalent degree, the ability to acquire sustained external, investigator-initiated funding, including National Institutes of Health principal investigator funding, a commitment to excellence in teaching, and excellent oral and written communication skills. Applications will be processed until the position is filled. Please submit curriculum vitae, summary of research interests, contact information, and three letters of reference to: Isaac Donkor, Ph.D. Professor and Vice Chair, Chair of Faculty Search Committee, Department of Pharmaceutical Sciences, 847 Monroe Ave., Suite 327, Memphis, TN 38163. The University of Tennessee Health Science Center located in Memphis, TN, an economically vibrant center, with a metropolitan population of more than 1.3 million, is a hub of the region, the University of Tennessee Health Science Center is an Equal Opportunity/Affirmative Action Employer.

Chair and Professor
Department of Genetics and Genome Sciences
The School of Medicine at Case Western Reserve University invites applications and nominations for the position of Chair of the Department of Genetics and Genome Sciences. The Department has a long-standing history of success, and is looking for an outstanding faculty member with the leadership and vision necessary to develop and strengthen an innovative research program that integrates basic genetics and genomics research with clinical and translational research. The Department has outstanding graduate programs, training both Ph.D. and graduate degree students as well as a Clinical Genetics program. The chair will be supported by a highly competitive research funding package.

The unified campus at CWRU facilitates collaborative interactions among scientists in the Schools of Medicine, Engineering, and Arts and Sciences, and with researchers in nearby affiliated hospitals and the Cleveland Center for Membrane and Structural Biology. Research missions are supported by excellent core facilities, including behavioral testing, whole animal imaging, confocal/multi-photon imaging, structural biology, proteomics, next-generation sequencing, bioinformatics, pluripotent stem cells, and a recently expanded and renovated animal facility that maintains a state-of-the-art transgenic core.

Applicants for this position must have a Ph.D. and/or an M.D. degree with a distinguished record of scientific achievement, demonstrated leadership skills, and a commitment to education and mentorship of students and faculty. Appointment as Professor of Genetics and Genome Sciences with tenure is anticipated and requires evidence of a productive and excellent research program recognized at the national/international level. Please submit a CV and letter of interest addressing research, educational, administrative and leadership goals to Dr. R. L. Brinster, School of Veterinary Medicine, University of Pennsylvania. E-mail: r,lbrinster@vet.upenn.edu.

Chair Professor
Department of Genetics and Genome Sciences
The University of North Carolina at Greensboro
Responsibilities: This position will perform NIH-funded research projects with a research area of alcoholic liver disease. The research projects aim at understanding the pathogenesis of alcohol-induced liver damage, and exploring preventive and/or therapeutic interventions.

This position is also responsible for data analysis, presentation of research findings at national/international meetings, and preparation of manuscripts for publication.

The minimum qualifications for this position include a Ph.D. degree in the field of biomedicine with 0–3 years of post-degree research experience; (2) 2 well-trained with advanced laboratory techniques in biochemistry, molecular biology and pathology; and (3) ability of research design, laboratory analysis and data interpretation. In addition, previous experience with animal and cell culture studies on intestinal barrier and alcoholic liver disease and strong records in scientific publications are required.

Salary: Fair market salary.
Contact: Please send a letter of interest, curriculum vitae, and a list of three references electronically to z_zhou@uncg.edu (Zhanxiang Zhou, Ph.D.).

POSTDOCTORAL FELLOW POSITION
The Center for Research Excellence in Bioactive Food Components
University of North Carolina at Greensboro
Responsibilities: This position will perform NIH-funded research projects with a research area of alcoholic liver disease. The research projects aim at understanding the pathogenesis of alcohol-induced liver damage, and exploring preventive and/or therapeutic interventions.

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