

the cell

JANUARY/FEBRUARY 2006
 VOLUME 25 NUMBER 1
 NORTHWESTERN UNIVERSITY
 BMBCB

UPCOMING EVENTS

BMBCB Departmental Seminar Series:

12:30 PM, Thursdays
 Pancoe Auditorium
 2205 Campus Drive
 For updates visit: [http://
 biochem.northwestern.edu/news.html](http://biochem.northwestern.edu/news.html)

February 9
Mechanism of a viral DNA packaging motor
 Dr. Yann Chemla
 UC Berkeley

Tuesday February 21
Real-time Kinetics of Gene Activity in Individual Bacteria
 Dr. Ida Golding
 Princeton University
Special Time 4:00pm

February 23
Mechanochemical analysis of DNA gyrase and other molecular motors
 Dr. Zev Bryant
 Stanford University



NORTHWESTERN
 UNIVERSITY

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NIH STUMBLES INTO 21ST CENTURY WITH A NEW ELECTRONIC GRANT PROPOSAL SUBMISSION PROCESS

Josh Schnell
 BMBCB Assistant Chair

As you may have heard, the National Institutes of Health is migrating grant submissions to a fully electronic system. At a recent video broadcast from the NIH campus, administrators from the NIH and the new federal grants clearinghouse, Grants.gov, explained the new process to audiences across the country, including at Northwestern University.

The NIH is touting the efficiency of an electronic system as the main reason for the transition. For the most part, electronic submission and review of grant proposals greatly eases the paper and administrative burden on the Institute, its staff and proposal reviewers, as well as simplifying proposal archiving activities. This decrease in clerical efforts on behalf of the Institute should result in faster review times, thereby reducing the time between application submission and receipt of funding for successful proposals.

Whatever the potential benefits are, as with all new systems, this process will require changes to existing procedures at Northwestern and within BMBCB; changes that will hopefully improve our current grant proposal preparation and submission processes. To that end, on Monday, February 6th, individuals from the BMBCB, NBP and LFS offices who assist with faculty grant proposals met with the Office of Sponsored Research to discuss how OSR will be handling this new process. OSR's Evanston Director, Sue Ross, listened carefully to the concerns of the departments and is likely to convene a cross-campus working group to prepare for this transition. The Life Sciences departments are likely to be integrally involved in helping OSR coordinate NU's own transition.

The BMBCB administrative office and the Life Sciences Financials Services staff are also developing new procedures and guidelines for providing support to faculty, postdocs and students who will be submitting through the new process. In addition, the primary duty of the upgraded Program Coordinator position (previously Nick Woell's position) will be to assist investigators with grants preparation and to help them navigate this new electronic submission process. In the coming weeks, the BMBCB office will be discussing the new system with department faculty with the goal of identifying at the outset those challenges which will require departmental resources to overcome.

In general terms, investigators must prepare a grant proposal package (called the SF424 Research & Related application) associated with a specific funding opportunity using a proprietary software program called PureEdge viewer that currently runs only on PC-based computers. NIH-specific (PHS398) forms must then be attached to this package as PDF files. The completed application package will then be submitted by the Office of Sponsored Research to the Grants.gov website. After a verification process that may require 2 days, an application that "passes" verification will move to the eRA Commons system where it will be assembled into a grant application and available for verification by

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MEET THE FIRST YEARS

Sara Layman West Lafayette, Indiana

Sara is rotating in the Hamid Band lab this quarter and building a construct to screen for specific small molecules that target a protein that is over-expressed in breast cancer. She did her undergrad and master's at the same time in biological engineering at Purdue University. Her master's thesis was on structural and enzymatic changes in a cancer associated protein and development of a mathematical model to describe it. Sara feels that the wealth of research choices in IBiS are more than just like being a kid in a candy store – its much better than that; its like being a nerd in a bookstore!



Ryan Hurtado Madison, Wisconsin

Ryan is in the Beitel lab studying protein interaction Fall Quarter. He graduated in 2003 with dual degrees in biochemistry and genetics from Madison, and worked for two years in a neurodegeneration lab. After graduation he taught college-level microbiology. Ryan loves all the research the faculty are doing here and chose IBiS for that reason. However, he plans to be a Badger's fan forever. Ryan wants to stay in academia so that he can pursue any research of interest that comes along.



Jeffrey Broussard New Orleans, Louisiana

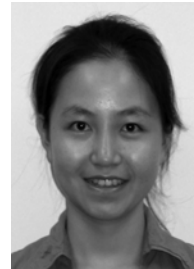
Jeffrey is rotating in the Shea laboratory, with a research focus on better understanding surface gene delivery with the goal of improving conditions that enhance delivery and expression in cell culture. He is interested in viral mechanisms of pathogenesis and immune system evasion, neurobiology of diseases, and coming up with ideas that can help our biology combat both of the former. He graduated in 2004 from Centenary College of Louisiana in Biology and Chemistry. Jeffrey's hobbies are studying other languages, playing lacrosse, dancing, and "...pretending like my graduate program gives me time to do those things!"



MEET THE FIRST YEARS

Sheng Ding Beijing, China

Sheng is doing her Fall Quarter research rotation in the Mirkin lab and researching antisense DNA. She graduated with a biotechnology and biological sciences degree from Tsinghua University. She has done laboratory research on the secondary and tertiary structure changes in the process of protein folding. Sheng really appreciates the interdisciplinary atmosphere in the IBiS program. She wants to explore the different research concentrations available to her in the program.



Ivelisse Cajigas San Juan, Puerto Rico

Ivelisse is doing research in Molecular Biology in the Horvath Lab this quarter. She majored in Biology at the University of Puerto Rico and worked in a Molecular Biology lab during her undergraduate studies. She also did two summer internships in the areas of Molecular Biology and Genetics; one at Stanford University and the other at Johns Hopkins University. Ivelisse says that the experience of getting to know new people and a new environment has been great for her. She is sure that during her years in the IBiS program she will have the opportunity to explore different careers in science, but for now, she pictures herself in academia.



Sandhya Rayappa Madras, India

Sandhya is a rotation student in the Allada lab this quarter. She earned her Bachelors in Industrial Biotechnology at Anna University in India. Her final-year project involved looking at the effects of exercise and low levels of corticosterone on the spatial learning and memory in mice. She is interested in neural development but is open to trying out different venues of research and feels that IBiS is the best ground for experimenting in a variety of labs.



POSTDOCTORAL OFFICE

...continued from page 1

the submitting investigator. Pls will need to be registered at the eRA Commons prior to submission. Once approved by the investigator, the grant proposal will move into the review process. After an initial assessment, some of the obvious challenges facing investigators and the Department administration in utilizing the new system include,

- The need for OSR to submit the application at least 2 days in advance of the deadline in order to ensure time to “verify” the application in Grants.gov.

- A current incompatibility of the application software package with Apple Macintosh computers (a Mac-compatible program is in development and is slated for release in November 2006).

- A current inability to replicate investigator-specific administrative information from one proposal to the next

How soon will this affect your proposal? The NIH is requiring electronic submission gradually, with the following dates in the near future:

02/25/06 – R15 (AREA awards)

03/22/06 – S10

06/01/06 – R03, R21/R33, R34

10/01/06 – R18/U18, R25, C06/UC6


01/22/07 – DP1

02/01/07 – R01

All grant proposals must be submitted electronically after 10/01/07.

As you begin preparations for your grant proposal, please contact Josh Schnell (x1-5762) so that the BMBCB office and the Life Sciences Financial Services staff can assist you with the new electronic submission procedures. In the meantime, more information is available at the NIH website created to address this new process <http://era.nih.gov/ElectronicReceipt/>.

SUBMISSIONS

 **The Cell** is published monthly by the Department of Biochemistry, Molecular Biology and Cell Biology at Northwestern University.

Editor: Chris Rathjen

Please send all comments, questions and submissions to:

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Evanston, IL 60208-3500

847.491.5068/bmbcb@northwestern.edu

NURJ? NURJ

Chris Rathjen

Editor

This May keep an eye out for a showcase of scholarship from some of Northwestern's most dedicated undergraduate scientists. NURJ.

Founded in 2003, the Northwestern Undergraduate Research Journal is an annual, student-run research journal seeking to promote undergraduate involvement in science and research. All papers submitted are authored by undergraduates currently doing research, and student volunteers are responsible for the writing, organization and critical review of the journal. While faculty members from various disciplines are part of a review board responsible for authenticating the content and quality of the papers, all final decisions on which submissions are included are made by the undergraduates. Based on the critiques of the student and faculty reviewers, authors are given an opportunity for revision before NURJ staff proceeds with the publication.

NURJ was founded by undergraduate students who, noticing similar scientific publications at Stanford, MIT, Johns Hopkins and other universities, wanted to give Northwestern undergraduates an opportunity to gain experience in drafting and publishing scientific papers. Vinhfiel Ta, this year's editor-in-chief of NURJ notes that “NURJ is still very young, so we are still in the process of solidifying our goals, maturing our presentation, and increasing our value. But it's an exciting time for exactly these reasons.” Ta anticipates roughly ten

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NEW PEOPLE



Please extend a warm welcome to these individuals who have recently joined our department:

Monica Beam is a new Grad Student in the Morimoto Lab.

Angene Milton is a new Grad Student in the Holmgren Lab.

Christine Brzezinski is a new Research Tech in the Morimoto Lab.

Matt Traverso is a new Grad Student in the Rosenzweig Lab.

Diana Vallejo Martinez is a new Visiting Scholar in the Carthew Lab

Yumiko Kobayashi is a new Research Assistant in the Bass Lab

Maria Casanueva is a new PostDoc in the Morimoto Lab

Ramakrishnan Balasubramanian is a new PostDoc in the Rosenzweig Lab

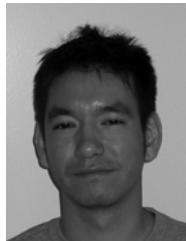
Patrick McMullen is a new Grad Student in the Morimoto Lab

Annie Topliff is the new Prog. Coord. for the Center for Structural Biology

MEET THE FIRST YEARS

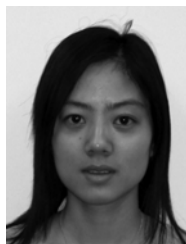
Christian Straub Frankfurt, Germany

Chris is now rotating in the Beitel lab which studies the tracheal development in flies. He got a bachelor's degree in neuroscience from Bowdoin College and has worked for three years in a zebrafish lab at the Children's Hospital in Boston. He chose the IBiS program for his PhD because of its encouragement for students to explore many areas of science. Chris's goal is to use this time at Northwestern to build skills and abilities helpful to reviewing scientific problems. He is interested in using that knowledge to work in either the industrial sector or in science policy.



Yi Wu Tsinghua, China

Yi comes from the Department of Biological Science and Biotechnology, Tsinghua University. She used to work in the Lab of Molecular Immunology there, investigating vaccine development for HIV with epitope peptide strategy. Now she is enjoying living and studying in Evanston, which she feels is very beautiful. She is doing her first rotation in Dr. Ameer's Lab, scaling up Beta-2-Microglobulin expression by exchanging the host from yeast to E Coli. She feels thankful to the people around her from whom she's received a lot of help. Yi likes the IBiS program because it allows her the freedom to choose her area of interest. After she finishes her PhD study, she hopes to go back to her home-country and work on science policy making, possibly in government.



Pinal Patel Aberdeen, Maryland

Pinal is in the Barron lab working on constructs to make peptides that can form hydrogels. His biology degree is from Towson University. Prior to IBiS, he worked for US Army Medical Research Institute of Chemical Defense making recombinant proteins in yeast to be used as therapeutics against chemical agent poisoning. He thinks Evanston is great and enjoys having everything within walking distance of his apartment. He likes meeting fellow IBiS students during classes and around campus, and thinks Group 3 in Genetics is awesome. He hopes to snowboard this winter and will be sending picturesque fall and winter snapshots to people back home. Pinal's career aspirations post-PhD are still undecided, but he will be doing his best to

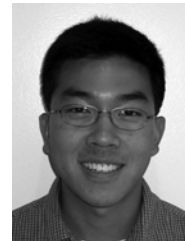


MEET THE FIRST YEARS

go out to one of the coasts. He is primarily interested in industry, but in what capacity, he is not yet sure.

Brian Chung Buffalo Grove, Illinois

Brian is currently rotating in the Turek lab, where he is working on a project that uses forward genetic techniques to investigate genes that may be important to the sleep/wake cycle. His biochemistry degree was completed at Washington University in St. Louis. Prior to coming to the IBiS program, he worked in labs that studied the DNA repair mechanism in yeast and the genetics of sleep in mice. Brian loves the city because he was born and raised here. He says the fact that his family and friends are near makes his experience here very enjoyable. Brian is not sure yet what he plans to do with his degree after he finishes.



Steven Philips Washington, Illinois

Steven is currently rotating in the Rosenzweig lab where he works on a thermophilic membrane protein called CopA, which exports copper or silver, in *Archaeoglobus fulgidus*. He did his undergraduate work at the University of Illinois at Urbana-Champaign where he majored in Molecular and Cellular Biology and French, and minored in Chemistry. At the U of I, he worked in Dr. John Gerlt's lab where he did mostly Chemistry, trying to oxidize carbohydrates which would serve as potential substrates for their enzyme of choice. The aspect Steven likes most about the IBiS program is the fact that there are so many biological disciplines from which to choose. He really appreciates not being confined to any specific type of biological science.



NORTHWESTERN UNIVERSITY

NURJ? NURJ

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submissions this year, comparable to the previous two years. As the journal grows he hopes that number will increase so that the journal has the option of being more selective. He credits NURJ's success so far to the efforts of dedicated students, and cooperation from the University. "We've been really grateful about the support we've received, especially financial support, from the University and its colleges in getting the journal started and running."

NURJ is currently accepting submission for their May 2006 issue. Submissions are due by February 10th. You can learn more at <http://www.nurj.org>

CENTER FOR STRUCTURAL BIOLOGY WELCOMES ANNIE TOPLIFF

This month the Center for Structural Biology has a new Program Coordinator, Annie Topliff. In what is a new position, Annie will be responsible for the Center's website and publicity, coordinating Center events and Grant Preparation, as well as providing general assistance for faculty involved in the center. Her hire is part of a BMBCB and WCAS plan to provide more administrative assistance to Biochemistry faculty through a system of Centers revolving around shared research topics. The Center for Structural Biology is a joint venture of Biophysics, Structural Biology and Molecular Biology. The center includes a number of faculty in the Department of Biochemistry, Molecular Biology and Cell Biology, the Department of Chemistry, and the Structural Biology Center at the Advanced Photon Source of the Argonne National Laboratory. Annie recently moved to Chicago to be closer to family and friends, after finishing work as a research coordinator for the two year study "Military Families on the Move: How Students Adjust," with Purdue's Department of Psychological Studies. She completed her undergraduate work in Psychology at James Madison University and has a Masters in Child Development from Tufts. Her hobbies include running, biking and snowboarding, the last of which is in short supply in Evanston. She is excited to be joining the Center and looks forward to her time at Northwestern. When you have a moment please welcome her to the department in her new office in Cook 4134.



EMPLOYMENT OPPORTUNITIES



A list of available and desired jobs relevant to the Department of Biochemistry, Molecular Biology and Cell Biology.

Research Associate

Arizona Research Laboratories, University of Arizona

Several positions are available in the Postdoctoral Excellence in Research and Teaching (PERT) Program. This is a comprehensive program which offers up to three years of support to outstanding candidates seeking advanced post doctorate research training, teacher training and student mentorship in preparation for an academic career. PERT trainees may select from among over forty-two faculty research mentors representing a broad range of disciplines in biomedicine, bioengineering, genetics, biochemistry, neurobiology, evolutionary biology, molecular/cellular biology, physiology and behavior. The program stresses the use of non-vertebrate models for Biomedical and Life Sciences research. The program is administered through the Arizona Research Laboratories Division of the Center for Insect Science and is partnered with a Minority Serving Institution, Pima Community College. Starting salary for program participants with less than one year of postdoctoral experience will be \$35,568, with an annual allowance for research supplies and travel. Additional information about the Center for Insect Science and the PERT program is available at <http://cis.arl.arizona.edu/PERT>. Applicants must have a Ph.D. in a related field and must be U.S. citizens or permanent residents. Applicants should have no more than two previous years of postdoctoral experience. Underrepresented minorities are especially encouraged to apply. All applicants must apply electronically through the University of Arizona Career Track website at: <https://www.uacareertrack.com>, citing job #32236. All applications are to include: a letter of interest with a statement explaining how the PERT program will assist the applicant in her/his career goals; a CV; a three to six page research proposal developed with the intended PERT faculty research mentor describing the project to be undertaken during the training period; three letters of reference; a letter of support from the intended faculty research mentor. The letter of interest, CV and research proposal should be submitted on-line through the Career Track website listed above. Review of applications will begin January 9, 2006 for appointments beginning thereafter and will continue until positions are filled. The University of Arizona is an EEO/AA/ADA Employer. Original letters of reference and the faculty research mentor letter of support should be mailed to:

PERT, Center for Insect Science
1007 E. Lowell Street, Room 227
University of Arizona
Tucson, AZ 8572 1-0106.

Faculty Position
Cell/Developmental Biologist
North Dakota State University

North Dakota State University invites applications for the position of Cell/Developmental Biologist to begin service on 16 August 2006. Located in the the Department of Biological Sciences, this 9-month, tenure-track faculty position in cell/developmental biology at the rank of assistant professor will be available fall, 2006. The position is 45% teaching, 45% research, and 10% service. Duties include teaching cell biology, developmental biology, participation in introductory biology, and advising undergraduate students.

Development of an externally-funded research program related to regulatory aspects of cell/developmental biology and training of graduate students also are expected. Minimum qualifications include Ph.D. degree from an accredited institution in a discipline appropriate to cell/developmental biology; demonstrated research experience in cell/developmental biology, including use of molecular approaches to the study of related regulatory-phenomen and evidence-of-peer reviewed-publication; strong potential to develop an externally-funded research program; evidence of interest and ability in teaching at the undergraduate and graduate levels; strong oral, written, and interpersonal communication skills, including demonstrated ability to work/collaborate with others. Preferred qualifications include postdoctoral experience, demonstrated ability in obtaining extramural funding, and broad-based interest in evolutionary aspects of cell/developmental biology. For information on North Dakota State University and the Department of Cell/ Developmental Biology, see <http://biology.ndsu.nodak.edu> Review of applications will begin January 10, 2006, and continue until the position is filled. Applicants PROCEDURE should submit a letter of application; a curriculum vitae; a description of research interests (2 pages maximum); a statement of teaching interests and philosophy; reprints of three representative publications; and contact information (including telephone numbers and e-mail addresses) for three professional references to:

Dr. Mark A. Sheridan, Chair
Cell/Developmental Biology Search Committee
Department of Biological Sciences
North Dakota State University
P.O. Box 5517
Fargo, ND 58105-5517
Tel: 701-231-8110 Fax: 701-231-7149 Nosuisanequalop
E-mail mark.sheridan@ndsu.edu

Tunure Track Faculty
Chemistry
Marian College

Marian College invites applicants for a tenure track position, beginning at the rank of Assistant Professor beginning Fall 2006. Instructional responsibilities include the one-year organic chemistry sequence, advanced organic, upper-division biochemistry, biochemistry for nursing, and participation in the general chemistry program. There will be opportunities for an advanced undergraduate

course in specialty and the direction of undergraduate research. Qualified applicant must have a BS in Chemistry and doctorate in organic or biochemistry; previous college teaching experience desirable. Candidate must willingly support the Mission and Core Values of the College. Review of applications will begin February 15, 2006 and continue until the position is filled. Marian College is a community committed to learning, dedicated to service and social justice and joined together by spiritual traditions. Marian College is an AA/EO Employer, strongly committed to diversity. To apply, submit a cover letter, curriculum vita, transcripts, a statement of your small-college teaching philosophy, and three letters of recommendation to:

Mail: Director of Human Resources
Marian College of Fond du Lac
45 South National Avenue
Fond du Lac, WI 54935
E-mail: cflood@mariancollege - edu
FAX: 920-923-7154

For more information see: www.mariancollege.edu

Post Doctoral Position
UC San Diego

Seth Field, a new faculty member at the University of California in San Diego (coming from Lew Cantley's lab at Harvard) has openings for post-doctoral fellows. The lab is interested in intracellular signal transduction by phosphoinositides, and is taking a few approaches that have been allowing us to identify novel functions for the phosphoinositides. One approach, a proteome-wide screen for phosphoinositide binding proteins, has spawned a number of exciting projects, connecting many unexpected areas of biology with regulation by phosphoinositides. Many of these would make great post-doctoral projects. The laboratory is spacious, well-equipped, and well-funded. Dr. Field is a member of the UCSD Cancer Center, the Division of Endocrinology, and the Biomedical Sciences Graduate Program. You can find out more about Dr. Field's laboratory on the web: <http://sethfield.ucsd.edu/> Interested candidates should send a CV and 3 letters of reference to me at the following address (or email):

Seth Field, M.D., Ph.D.
University of California, San Diego
George Palade Laboratories, Room 338
9500 Gilman Drive, MC-0707
La Jolla, CA 92093-0707
sjfield@ucsd.edu

Fulltime Lecturer
Department of Chemistry & Biochemistry
Baylor University

Department of Chemistry and Biochemistry (ACS certified) seeks two full-time Lecturers to teach General Chemistry beginning with the 2006-07 academic year. PhD in Chemistry and prior teaching experience strongly preferred. As an Affirmative Action/Equal Opportunity Employer, Baylor encourages minorities, women, veterans, and persons with disabilities to apply. Applications received by February 15, 2006 will receive full consideration; however, the search will continue until the positions are filled. Baylor University is

a Baptist University affiliated with the Baptist General Convention of Texas. Send letter of application, CV, three letters of recommendation, undergraduate and graduate transcripts, and statement of teaching philosophy to:

Dr. Marianna Busch, Chair,
Chemistry and Biochemistry,
One Bear Place #97348,
Baylor University, Waco,
TX 76798-7348.
Marianna_Busch@baylor.edu

**Professor and Administrative Chair
Department of MicroBiology
Miami University**

Miami University invites applications and nominations for Professor and Administrative Chair of the Department of Microbiology on the Oxford campus. The University is seeking an outstanding senior scholar with an excellent record in research and effective teaching to provide leadership to complement and expand the Department's strengths in research and undergraduate and graduate education in Microbiology. The position will begin by August 2006. Miami University does not discriminate on the basis of sex or sexual preference, race, color, religion, national origin, handicap, or age in its educational programs, activities, admissions, or employment policies. Screening will begin February 1, 2006, and will continue until the position is filled. Applicants must submit a curriculum vitae; brief essays on leadership goals and vision including evidence of administrative ability and/or potential, on research interests and goals, and on teaching philosophy; 3 reprints; and contact information for 5 references. Exceptional candidates currently at the Associate Professor level will also be considered. Please send applications to:

Department of Microbiology
Attn. Chair Search
32 Pearson Hall
Miami University
Oxford, Ohio 45056
Phone: (513) 529-4200
FAX: (513) 529-4243
or by email to microbiology@muohio.edu (as a single pdf plus reprints)

**Assistant Professor
Center for Plant Cell Biology
University of California, Riverside**

The department is seeking an ASSISTANT PROFESSOR in plant cell biology with an emphasis in quantitative approaches, such as mathematical, statistical, computational, chemical genomics and systems biology. The candidate will join the Center for Plant Cell Biology (CEPCEB) within the Institute for Integrative Genome Biology (11GB) at the University of California, Riverside, and an academic department of his or her discipline. Individuals should work at the forefront of contemporary plant cell biology and utilize a multidisciplinary approach in an area such as, but not limited to, cell cycle regulation, cell wall and/or cytoskeleton dynamics and

function, programmed cell death, protein/RNA trafficking, or intracellular/intercellular signaling. The successful candidate will have a faculty appointment in the academic department of his or her discipline. Applicants must hold a Ph.D., with at least one year, 2-3 years preferred, postdoctoral experience or equivalent. The successful candidate will be expected to establish and maintain a vigorous, innovative research program, have a strong commitment to excellence in teaching at the undergraduate and graduate levels, and participate in departmental and interdepartmental graduate programs. The position description is available on the CEPCEB website at the address listed below. This position includes an appointment in the Agricultural Experimental Station and will be available effective July 1, 2006. Review of applications will begin on January 23, 2006 and will continue until the position is filled. The University of California is an equal opportunity/affirmative action employer. To apply applicants should send CV, including a statement of research interests, and letters of three references to:

Crystal Smith
Institute for Integrative Genome Biology
2132 Batchelor Hall
University of California, Riverside
Riverside, CA 92521-0124
Websites: <http://www.genomics.ucr.edu>, <http://www.cepceb.ucr.edu>
and <http://www.ucr.edu>

**Assistant Professor Position
Department of Biochemistry and Biophysics
University of Pennsylvania School of Medicine**

The Department of Biochemistry and Biophysics at the University of Pennsylvania School of Medicine seeks candidates for several assistant professor positions in the non-tenure research track. Responsibilities include independently designing and carrying out high throughput screening of small molecules as potential therapeutics for spinal muscular atrophy under the direction of the principal investigator. Applicants must have a Ph.D. or equivalent degree and have demonstrated excellent qualifications in research. The successful candidates are also expected to assist the principal investigator and advise graduate students and research technicians in projects in the use of robotics and lab automation, and in research in the area of the molecular functions of the SMN protein. The effective date of the appointment will be May 1, 2006. The University of Pennsylvania is an equal opportunity, affirmative action employer. Women and minority candidates are strongly encouraged to apply. Please submit curriculum vitae, a brief statement of research interests, and have three reference letters sent to:

Ruth Keris
Staff Assistant
Department of Biochemistry and Biophysics
University of Pennsylvania School of Medicine
245A Anatomy-Chemistry Building
Philadelphia, PA 19104-6059

NOW ACCEPTING: EVENT ANNOUNCEMENTS, ARTICLE IDEAS, EMPLOYMENT OPPORTUNITIES, POSITIONS WANTED AND GENERAL ANNOUNCEMENTS.

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If you think you would enjoy receiving the Cell or would like to be removed from the mailing list, please refer to the following:

The Cell

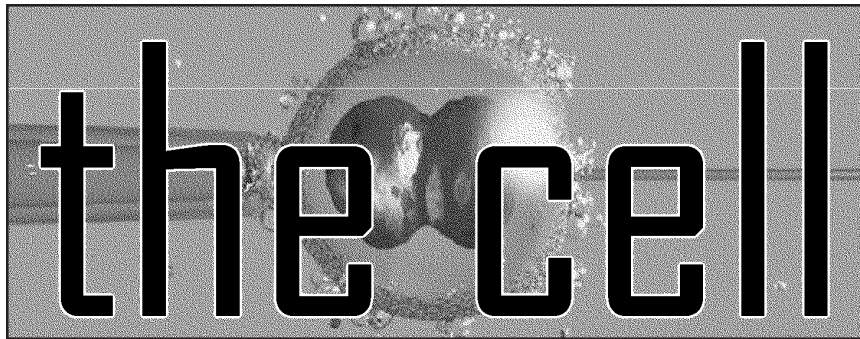
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N O R T H W E S T E R N U N I V E R S I T Y
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