

UCSD Generation Rx By Greg Estep, P-2 and Nathan Painter, Pharm.D.

The goal of Generation Rx for UCSD was straightforward: to reach as many high school and middle school students as possible. However, this was not to be conducted in a drawn out manner, but as efficiently as possible, in order to maximize effectiveness. This project hit the ground running, with two training sessions and three presentations all done in the last three months. Not to mention that Generation Rx has two excellent Faculty Advisors, Dr. Eduardo Fricovsky and Dr. Nathan Painter.

Thirty-nine student pharmacists attended the two training sessions and Team Generation Rx was born. The training sessions were interactive and sought to immerse

the student pharmacists in the role of their student audience. From these trainings it became apparent that modifications and increasing the interactive nature of the Generation Rx base materials would be necessary. In addition, some sort of a hook to grab the attention of students would be needed. Student pharmacists Tiffany Tom (P1) and Greg Estep (P2) worked together to create a fourminute DVD video that would catch the students' attention. This video is available for viewing on youtube.com (http:// www.youtube.com/watch?v=KRw5Q111hLs).

The inaugural site for the UCSD Generation Rx project was Memorial Preparatory for Scholars and Athletes, a middle school in San Diego. Seventeen hour-long sessions were held over two hours by 16 UCSD Generation Rx team



UCSD's Team Generation RX at Memorial Preparatory for Scholars and Athletes

members, reaching 510 students. The feedback was great and there was engagement between the students and the presenters. The next school was Olympian High School where 13 sessions were conducted with 15 Generation Rx team members presenting over two hours and reaching 390 students. Dr. Painter, who came to show his support of *Continued on next page*

In This Issue					
SSPPS News	1 - 3	Clinical Faculty Accomplishments	10		
Student News	4 - 9	Library Corner	11		

Continued from previous page

the students, says "the students gave excellent presentations and were able to relate to the high school students. Prescription drug abuse is a serious problem in the country and in the San Diego area. This is a great way to help educate kids early." All of the presentations have been great and everyone involved had a great time.

We are looking forward to putting on a play based on Generation Rx and Dr. Nathan Painter is developing a Generation Rx elective for SSPPS students. The elective course will be geared towards increasing proficiency for giving presentations and center on the subject of prescription drug abuse. It is still in the planning stages, but currently the inaugural class is scheduled to be held in the fall of 2012. The future looks very bright for Generation Rx.

To see a video of student participants acting out how a teenager might get pain medications and overdose, go to <u>http://youtu.be/8ZaSwW-Dsvg</u>.

For more information about the Generation RX Initiative and resources on prescription drug abuse, go to <u>http://pharmacy.osu.edu/outreach/generation-rx/</u>.

On December 14, 2011 Associate Dean Charles E. Daniels, Ph.D. was inducted into the Academie Nationale de Pharmacy after nomination by the Hospital Pharmacy Section. As correspondant à titre étranger, Professor Daniels will contribute on an ongoing basis to the work of the Academie through contributions to Academie publications, or work groups.

Karla A. Choy and Sally Rafie have co-authored an article, "Procedures to improve prescribing and dispensing of oral contraceptives at an academic medical center," accepted and published in American Journal of Health-System Pharmacists – Volume 69 Feb 1, 2012 pg 249-252.

Walgreens Establishes Diversity Scholarship at SSPPS By James Colbert, Pharm.D., Associate Dean for Experiential Education

At a small luncheon this past November, Dr. Joy Reese, Pharm.D., District Supervisor for Walgreens in San Diego presented Dean Palmer Taylor and SSPPS with a donation of \$10,000 to establish the Walgreens Diversity Scholarship. Student recipients of this award will be reflective of the increasing diversity of our student population. Funds from this award will also be directed to diversity and to populations that are underserved with regards to effective and consistent pharmaceutical care. Walgreens has been a consistent supporter of the SSPPS educational program, including significant contributions to experiential education and other aspects of the curriculum. Thank you, Dr. Reese and Walgreens!



Almutairi Lab Publishes on Breakthrough Polymeric Material for Drug Delivery

Dr. Adah Almutairi's group recently created a polymer that can break down into small molecules in response to low power near infrared light. Because this form of light can safely penetrate several centimeters deep into tissues, encapsulating or enmeshing drugs or other biologically active molecules in this breakthrough material would allow researchers or clinicians to noninvasively control the time and location of their delivery.

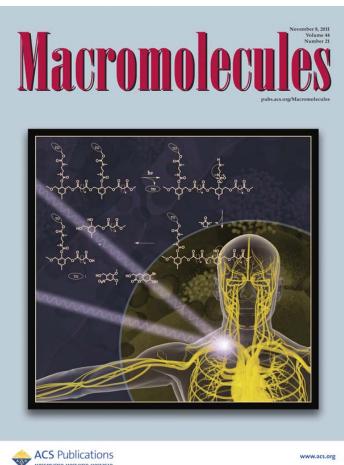
No other polymer with this capability has yet been designed. The resulting publication, whose lead authors were

postdocs Nadia Fomina and Cathryn McFearin, was featured on the cover of the journal *Macromolecules*. Because the work is so exciting, it has received considerable media attention from biotech publications and was covered in an article on ScienceNOW.

While most targeted delivery systems require understanding of how diseased tissue differs from healthy tissue on a molecular level, a light-degradable material would allow delivery of treatment for any disease. This material could also be useful as a research tool, allowing uniform, noninvasive delivery of drugs, proteins, or siRNAs at desired time points without genetic manipulation.

Because near infrared light is such a useful potential remote trigger for drug delivery, other types of delivery vehicles that respond to it have been developed. However, these assemblies require relatively high power irradiation, which is not as safe as the stimulus to which Almutairi's polymer is sensitive, and release their contents by disassembling rather than breaking down into small molecules that can be easily cleared from the body.

Dr. Almutairi's group is currently working on developing polymers with even greater sensitivity to infrared and with different chemical properties to allow a wider variety of formulations.



The 5th South East Asian Intercollegiate Summit By Binh Tran, Pharm.D.

The 5th Southeast Asian (SEA) Intercollegiate Summit held at UCSD on January 13-15, 2012 and entirely run by students was a big success. This year's theme, "Rising from the Concrete", attracted students from the entire

University of California system, faculty sponsors, guests and friends, discussing a spectrum of issues affecting the students



students in the multiple areas of political, social and cultural education. On Friday, there were two



plenary sessions: the first one focusing on Higher education, Immigration, and K-12 education, and the second session on Health, LGBTIQ, and Violence. Binh Tran spoke of the

health issues facing the Asian populations, especially Hepatitis B within the Hepatitis Free San Diego Project.

Educating Older Adults on Shingles and Pneumococcal Disease, October 2011

By Sheryl Gong, P-3 and Beverley Freedman, Pharm.D.

On a warm October morning, student members from (American Society of Consultant Pharmacists) ASCP visited the College Avenue Older Adult Center to present information on Shingles and Pneumococcal disease and their vaccination. The College Avenue Center is a day facility where older adults can meet for social as well as educational activities. The philosophy of the center is to promote healthy aging among older adults. This provided a unique opportunity for the UCSD Skaggs School of Pharmacy and Pharmaceutical Sciences students to provide much needed and useful information to a very receptive audience. The student's aim in providing this outreach is to empower the community through information, thus giving individuals a greater awareness of the signs and symptoms, as well as preventative measures available, so that they may take charge of their lives. Correct communication with individuals in explaining various diseases and their prevention, is a way in which student pharmacists Can not only practice their communication skills but also assist in building a relationship with seniors. Student pharmacists Mackenzie Bear, Sheryl Gong and Natasha Gorley together presented a talk on shingles and pneumococcal disease and then discussed their vaccinations. There was a significant turn out and the questions and answer session provided much education as well as entertainment with many of the participants sharing their concerns as well as their personal stories. With thanks to our preceptor, Dr. Beverley Freedman, this event was a huge success- both students and participants alike learned a great deal.

Page 4

Once again, UCSD SSPPS was well-represented at the California Society of Health System Pharmacists (CSHP) Annual Seminar Meeting, held in Anaheim on November 3rd-6th. As a co-Faculty liaison for the SSPPS CSHP-UCSD student chapter, along with faculty and

preceptors, I attended this clinically- focused and spirited meeting with the following summary and outcomes of UCSD SSPPS's many accomplishments:

UCSD SSPPS's Mary Moss and Traci Bricker (P4s) placed FIRST in the Clinical Skills Competition

In a challenging competition and competing against student pharmacists from seven other schools, Mary and Traci took home the trophy, representing our very first time winning this competition. Currently, they are preparing for the National Clinical Skills Competition at the ASHP Midyear Clinical Meeting in December.

UCSD SSPPS placed SECOND in the CSHP Pharmacy Quiz Bowl

In a Jeopardy-style competition with many technical challenges, our

P4s hung in there to answer pharmacology and therapeutic question in categories ranging from infectious disease to oncology and cardiology, (and even some Disney facts), to place second in this spirited and collegiate event among all eight California pharmacy schools. P4s who represented our team included Traci Bricker, Tihua Chao, Mary Moss, Natalie Hohmann, Lindsey Hohmann, Pamela Ny, Jessica Lau, Joanna Cole, Christine Luu, and David Ha. Way to go!

CSHP-UCSD won TWO Student Chapter Community Service Project Awards for Asthma Awareness and Poison Prevention-

Led by Co-Chairs **Lily Wong** and **Marina Zotova** for Asthma Awareness, Chair **Colleen Tu** for Poison Prevention, and President **Susan Cho** and President Elect **Stephanie Chauv**,

UCSD SSPPS's CSHP-UCSD chapter was recognized by the CSHP Board of Directors for its members' tremendous outreach efforts in our San Diego Community!

Susan Cho, P4, recognized as CSHP UCSD Student Leadership Award recipient-

Susan was acknowledged at the CSHP Awards Session and received an award for her strong leadership efforts for the student chapter CSHP-UCSD..

Michelle Lew (P3) and Joy Jiang (P4) were CSHP- UCSD SSPPS Delegates to the CSHP House of Delegates-

Michelle and Joy represented the CSHP-UCSD SSPPS Student Chapter during the two House of Delegate sessions. UCSD SSPPS Faculty members and preceptors included Marcie Lepkowski, Prudy Morris, Linda Awdishu, Harminder Sikand, Helen Park, and Candis Morello





Continued on next page

Continued from previous page

Susan Cho (P4) represented student pharmacists on the CSHP Student Section Executive Committee-

Student Pharmacists voices are heard on this committee. Michelle Lew (P2) will be replacing Susan this month as the SSEC Representative.

Eight Student Pharmacists participated in California Pharmacy Student Leadership Program (CAPSLEAD) 2011 and presented their Poster at Seminar-

A team of student pharmacists including **Angela Bougetz, Natalie Elder, Greg Estep, Rebecca Kandilian, Kellie Kocher, Kathy Le, Michelle Lew & Tiep Ly** presented their CAPSLEAD poster entitled "CALIFORNIA PHARMACY MANPOWER: THE POTENTIAL IMPACT OF



NEW PHARMACY SCHOOLS AND EMERGING TECHNOLOGIES." The poster's focus was the topic of many discussions at Seminar and even at the House of Delegates! Faculty advisors were Drs. Sarah McBane and James Colbert.

A Packed UCSD SSPPS Alumni Reception-

Dr. Charles Daniels hosted a very well-attended Alumni Reception at ESPN Zone in Downtown Disney that included alumni from multiple classes, current students (P1s through P4s), residents, preceptors, faculty members and our fearless Dean Palmer Taylor. A fun time was had by all!

Several Continuing Pharmacy Education Presentations Given by UCSD SSPPS Faculty and Affiliates-Several faculty and preceptors provided CE lecture presentations including Linda Awdishu, Renu Singh, Panteha Kelly, Joseph Ma, Margaret Mendes, Susan Leckband, Anthony Morreale, and Victoria Serrano Adams

Residency Showcase-

In addition, significant numbers of students attended this meeting taking advantage of the Residency Showcase where they were able to learn about the postgraduate education programs and meet residency program directors and preceptors.

The Incoming 2012 CSHP President is Christine Antczack!

Our new leader at CSHP, Christine Antczack, PharmD, was installed as President at Seminar. Dr. Antczak has been a lecturer and faculty advisor for our Pharmacy Practice course for many years. Seminar 2012 marks the 50th Anniversary of CSHP

in Las Vegas-

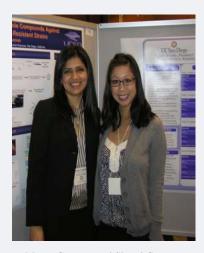


We are all looking forward to another successful and exciting meeting next year when CSHP Seminar 2012 "Jackpot Pharmacy" and the 50th Anniversary will be celebrated in Las Vegas.

Summer Research Students Shine at the Annual Poster Session By Brookie Best, Pharm.D.

In the summer of 2011, 36 student pharmacists from the Classes of 2013 and 2014 successfully completed research

projects (see table below) with support awarded from multiple sources including the Millenium Research Institute, the Skaggs Foundation, the Clinical and Translational Research Institute (CTRI) TL-1 Training Grant (1TL1RR031979-02), the SCAlable National Network for Effectiveness Research (SCANNER)



Mayra Guzman and Sheryl Gong

project funded by the Agency for Healthcare Research and Quality (R01HS019913), Ruben Abagyan's Research Fund, and the NICHD T35 Predoctoral Training Grant in Maternal and Pediatric Pharmacology (1T35HD064385). Over 70 medical and pharmacy trainees presented their findings to UCSD Health Sciences deans, faculty, staff and students at the Annual Poster Session held on Thursday, January 5, 2012. The breadth, scope and quality of the projects presented were excellent. Extra congratulations are due to Iris Chen (Class

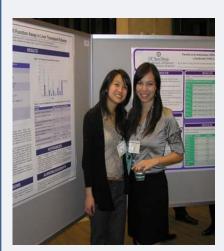


Elizabeth Jackson and Albertino Tran

of 2013), as one of two recipients of the UCSD Biomedical Library's Best Use of Literature Award, and to Michelle Hughes (Class of 2013), as one of three recipients

of the inaugural CTRI Awards for Outstanding Posters. Expect all of

these project results to have far-reaching impact in advancing the fields of pharmacy and pharmaceutical sciences through publications and presentations at top-tier peer-reviewed scientific meetings. So far, students have presented/will present at the American Society of Pharmacognosy 52nd Annual Meeting and Exhibition (K. Kocher and S. Shu), PAINWeek'11: The National Conference on Pain for



Colleen Tu and Wei Tai

Frontline Practitioners (N. Barakat, N. Elder, A. Guo, M. Hughes, S. Luk, K. Moy, S. Tse, D. Yee), the American Society of Health-System Pharmacists 46th Midyear Clinical Meeting (J. Pham), the



Dr. Robert Gish, Sandy Chong, and Dr. Binh Tran

Mass Spectrometry Applications to the Clinical Lab 4th Annual Conference & Exhibits (N. Barakat, S. Luk, S. Tse), American Academy of Pain Medicine's 28th Annual Meeting (S. Bordson, A. Guo, S. Luk, K. Moy, D. Yee), the American Pharmacists Association Annual Meeting & Exhibition (A. Bougetz and I. Gutman), and the American Society for Clinical Pharmacology and Therapeutics Annual Meeting (S. Gong, W. Tai and C. Tu). To learn more about these projects, please check the poster display cases on the 1st floor of PSB over the next few months. Congratulations to all the students and a heartfelt thank you to all the mentors and sponsors for these outstanding accomplishments!

Continued on next page

Student	Primary Mentor	Project Title
Amin, Khadija	Best, Brookie	Fosamprenavir Exposure in HIV Positive Mothers and Fetuses During and after Pregnancy
Aparicio, Mark	Mandyam, Chitra	Chronic Voluntary Wheel Running Decreases Compulsive Methamphetamine Drug Seeking
Barakat, Neveen	Pesce, Amadeo	The Conversion of Hydrocodone to Norhydrocodone and Hydromorphone in Subjects with Chronic Pain
Bordson, Sophie	Pesce, Amadeo	Factors Affecting Urinary Excretion of Amitriptyline in Patients with Neuropathic Pain
Bougetz, Angela Gutman, Irina	Abagyan, Ruben	Quantitative Structural Pharmacology of Antibacterial and Cardiovascular Therapeutic Agents
Chan, Andrea	Sewer, Marion	Sphinganine Analogs Reduce Breast Cancer Cell Viability by Inducing CYP27B1 for Increased 1,25(OH)2D3 Production
Chen, Debbie	Yam, Felix	Rates of Readmission, Mortality and Quality Indicator Performance Among Patients with Severe Alcoholic Liver Disease
Chen, Iris	Sears, Dorothy	The Effects of Omega-6 and Omega-3 Fatty Acids on Adipose Tissue Inflammation
Chong, Sandy	Tran, Binh	Barriers to Hepatitis B Screening and Hepatitis B Knowledge among Asian populations in San Diego County
Elder, Natalie	Pesce, Amadeo	Assessing Concomitant Use of Oxycodone Formulations with Known Strong Cytochrome P450 (CYP) 2D6 Inhibitors in Patients with Pain
Gong, Sheryl	Ma, Joe	Oral Midazolam (MDZ) Partial Area-Under Curve (AUC) does not Reliably Predict Cytochrome P450 (CYP) 3A Inhibition and Induction/Activation in Healthy Subjects
Guo, Alex	Pesce, Amadeo	Concurrent Non-prescribed and Illicit Drug Use in Patients Prescribed Buprenorphine
Guzman, Mayra	Eckmann, Lars	Screening 5-Nitroimidazole Compounds Against Helicobacter pylori Resistant Strains
Hoang, Karen	Abagyan, Ruben	Quantitative Structural Pharmacology of Covalent Modifiers as Cancer Therapeutics
Hughes, Michelle	Pesce, Amadeo	Observation of Improved Adherence with Ongoing Urine Drug Testing in Patients with Chronic Pain
Jackson, Elizabeth	Yam, Felix	Prescribing of Antipsychotics for the Treatment of Delirium in Elderly Hospitalized Patients in an Academic Medical Center
Kandilian, Rebecca	a Le, Jennifer	Population Pharmacokinetics of Vancomycin in Obese and Renally- Compromised Pediatric Patients
		Continued on next page

Continued on next page

Student Primary Mentor

Project Title	
ctural Pharmacology of Antidepressant and Ar	nti-Parkinson

Kim, Gloria	Abagyan, Ruben	Quantitative Structural Pharmacology of Antidepressant and Anti-Parkinson's Agents
Kim, Jiah	Le, Jennifer	Vancomycin Dosing in Children by the Area-Under-the-Curve (AUC)
Kim, Sean	Molinski, Ted	Pyrrole-imidazole Alkaloid (PIA): Synthesis of Non-natural Pre-agelastatin A Analogs, (-)-Agelastatin A and their Pharmacokinetic (PK) Properties
Kocher, Kellie Shu, Stephanie	Gerwick, William	UCSD Skaggs School of Pharmacy and Pharmaceutical Sciences: Initial Efforts in Launching a Pure Compound Library
Liu, Janet	Kuo, Grace	Using Health Informatics Tools to Evaluate Pharmacist-Physician Collaborative Diabetes Management
Luk, Samantha	Pesce, Amadeo	The Distribution of Diazepam Urinary Metabolites in a Sample of Patients with Chronic Pain
Ly, Tiep	Sikand, Harminder	• Evaluation of Acetaminophen Use in an Inpatient Teaching Hospital – Are We Inadvertently Causing Harm?
Ma, Jennie	Kuo, Grace	Using Health Informatics Tools to Evaluate Pharmacist Physician Collaborative Hypertension Management
Moy, Kathleen	Pesce, Amadeo	Variability in Meperidine Metabolism and Excretion in Patients with Chronic Pain
Nguyen, Christina	Gustafsson, Asa	Role of Parkin in Regulating Mitochondrial Autophagy in the Myocardium
Nguyen, Kha	Kuo, Grace	Assessing Major and Minor Bleeding Incidences Associated with Antiplatelet Medications
Nourmand, Neda	Eckmann Lars	Phenotypic Classification of Metronidazole Resistant Giardia lamblia Cell Lines
Pham, Jennifer	Lam, Jason	Assessing Core Measure Compliance for Appropriate Empiric Antibiotic Selection in Community Acquired Pneumonia Order Sets within a Multi- hospital Electronic Medical Record
Tai, Wei-hsuan	Ma, Joe	Partial Oral Midazolam (MDZ) Area-Under-Curve (AUC) does not Reliably Predict Cytochrome P450 (CYP) 3A Baseline Activity in Healthy Subjects
Tran, Albertino	Nguyen, Anh	A Retrospective Chart Review of Vincristine-Associated Neurotoxicity in the Setting of Concomitant Azole Antifungal Administration in Pediatric Acute Lymphoblastic Leukemia
Tran, Annie	Pajor, Ana	Screening NSAIDs and NSAID derivatives for potential inhibitors of Human Sodium Dicarboxylate Cotransporters (hNaDC1)
Tu, Colleen	Tsunoda, Shirley	Effect of Sirolimus on Immune Cell Function Assay in Liver Transplant Recipients

Clinical Faculty Accomplishments By Grace Kuo, Pharm.D., M.P.H., Ph.D.

CLINICAL FACULTY RECRUITMENT

Jennifer Namba, Pharm.D. has accepted our offer of appointment as a full-time Health Sciences Assistant Clinical Professor, effective February 1, 2012. Jennifer will be engaged in areas of instruction in clinical pharmacy, mentoring in advanced practice experiences and continuing her academic and service commitments to UCSD Healthcare. Jennifer has been committed to SSPPS academic programs since taking her initial position at UCSD Healthcare and comes to us with teaching experience and student accolades. Please welcome Dr. Namba!

HONORS and AWARDS

Dr. Brookie Best

Invited to serve as a member of the *Women's Health Advisory Committee* (WHAC), and as the WHAC Liaison to the *HIV Treatment Scientific Committee* for the NIAID/NICHD International Maternal Pediatric and Adolescent AIDS Clinical Trials Group (IMPAACT).

Dr. Grace Kuo

Invited to serve on the planning committee for the meeting "Pharmacist Education in the Era of Genomic Medicine", sponsored by the National Human Genome Research Institute (NHGRI), on November 30 and December 1, 2011 in Rockville, Maryland. Representatives from ten pharmacy organizations, including AACP, AAPS, ACCP, ACPE, AMCP, APhA, ASCP, ASCPT, ASHP, and NASPA, attended the meeting. Representatives from other professional organizations (AMA, IMS, NCHPEG, nursing and physician assistant programs) and government agencies (NHGRI, NCI, DHHS-HRSA, CMS, FDA) were also present.

Dr. Sarah McBane

Installed as President of the San Diego County Pharmacists Association.

Dr. Nathan Painter

• Successfully completed NCLAM (National Center of Leadership in Academic Medicine) program .

Dr. Renu Singh

Successfully became a Board Certified Ambulatory Care Pharmacist (BCACP). (Note: This is the first year that this certification exam has been offered.)

COMMUNITY OUTREACH

Dr. Brookie Best

- Participated in the "Inspire" Faculty/Student mixer with UCSD undergraduate students interested in science careers on January 17, 2012.
- · Invited and served as a judge for the CTRI Summer Research Poster award on January 5, 2012.

Dr. Grace Kuo

- Participated in the "Inspire" Faculty/Student mixer with UCSD undergraduate students interested in science careers on January 17, 2012.
- Invited and served as a judge for the CTRI Summer Research Poster award on January 5, 2012.

Dr. Nathan Painter

- Volunteered as a "roving educator" at the 2011 Take Control of Your Diabetes Annual Conference and Health Fair on November 12, 2011.
- Hosted six Medicare Part D outreach events helping more than 50 residents choose prescription coverage for next year.

Dr. Renu Singh ·

• Served as a judge for the APhA-ASP UCSD Patient Counseling Competition January 21, 2012.

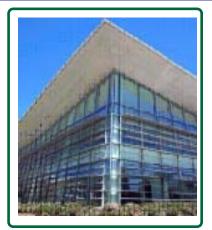
BioMedical Library

Biomedical Library (BML) 9500 Gilman Drive 0699 La Jolla, California 92093-0699 **Penny Coppernoll-Blach, MLS** Biomedical Libraray Liason for SSPPS

pblach@ucsd.edu (858) 534-4431

Email Reference Service: biomed@ucsd.edu

Visit the library website for hours: http://scilib.ucsd.edu/bml/



Check Out the New Winter 2012 Online Issue of BML's CURRENTS

By Penny Coppernoll-Blach, MLS

The Winter 2012 issue of the Biomedical Library newsletter, CURRENTS, is now available online at:

http://libraries.ucsd.edu/_files/bml/currents/currents_v13no2.pdf

This issue includes articles featuring:

- * Library Restructuring Underway
- * Native Hawaiian Health Displays
- * Data Management Plan Tool
- * Wireless Printing from Laptops and Mobile Devices
- * New Resource: Current Protocols in Stem Cell Biology
- * Annex Requests and Delivery Improvements
- * Biomedical Library Workshops
- * Q&A E-Books from UC San Diego Libraries to Kindle

The entire list of CURRENTS issues, past and present, is located on the Biomedical Library at:

http://libraries.ucsd.edu/locations/bml/overview/newsletters-bml.html

CURRENTS is produced three times a year. We will let you know when the next issue of CURRENTS is released.

Page 11