

February 2008



Office of Education, Division of Intramural Research  
National Heart, Lung, and Blood Institute

## FELLOWS NEWSLETTER

The Fellows Newsletter is published monthly by the Office of Education, Division of Intramural Research, National Heart, Lung, and Blood Institute and distributed to NHLBI DIR members to promote the interest of DIR Fellows.

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### ***From the Director of the Office of Education***

As you know, I meet with all new fellows soon after they arrive here. One purpose of these meetings is to introduce fellows to the functions of the Office of Education, but another, even more important, reason is to remind fellows that they are here for a short time in order to receive training that gets them to their desired goal. While many fellows take this to heart, others so enjoy their time here that they forget that the primary purpose of being here is to receive advanced mentored research training, and instead begin to think of their fellowship as a job. One way we minimize this possibility is through the annual report form. The first question asks you to state your career goals. The next questions address your research achievements and goals, which ought to be consistent with your career goals. The answer should be the major focus of the discussion with your mentor: does your mentor agree that you are likely to achieve these goals? Do you think you are receiving the necessary training to achieve them? If not, it's either time to redefine your goals or realize that you would be better off in a laboratory where you are getting the necessary mentoring. If you have any doubts about your situation, please come and visit my office for a confidential discussion of your situation.

On another note, this month, the Office of Education welcomes our new staffer, Aurora Taylor. Aurora is a student at the University of Maryland at College Park, majoring in Family Studies. She brings a significant amount of organizational experience, having worked at the University of Maryland Conference Center. So next time you are in Building 10 after 3:00, come by and welcome her.

**Registration for the NHLBI DIR Fellows Retreat  
Now Open!**

**Registration Closes Feb 15th!**

**Abstract Submission March 1!**

**March 13-14, 2008**

**Loews Hotel Annapolis, MD**

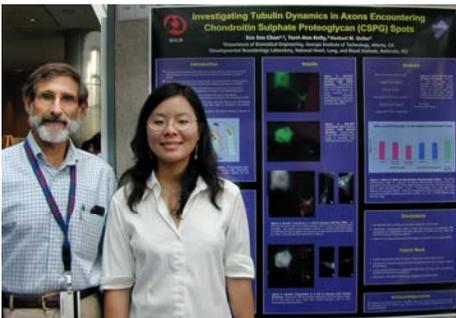
<http://dir-intranet.nhlbi.nih.gov/oe/>

**abstractsubmission**

## Why YOU Should Mentor a Summer Intern

by  
Herbert Geller, Ph.D.

Summer interns arrive on campus in the spring, full of energy and excited at the prospect of doing research at NIH. For many, their experience on campus is critical for their future in science. They require high-quality mentoring and, in return, offer their mentors an opportunity to shape the next generation of scientists. This mentoring experience is especially valuable for NHLBI fellows as they move on to jobs where management skills are essential. With so many applicants in the pool, how do you choose a particular student? Two examples of 2007 interns who have applied to the NIH for their graduate work represent examples of successful interns, as well as the long-lasting effects of a positive experience during their summer internship.



Inn-Inn Chen is a senior majoring in Biomedical Engineering at Georgia Tech who was a summer intern last year in my laboratory under the auspices of the BESIP program, sponsored primarily by NIBIB. Inn-Inn had a major interest in tissue engineering, and was working as an undergraduate student researcher since the fall of 2005. She was working in the area of biomaterials research for use in medical devices, and

so she chose to work with Postdoctoral Fellow Terri Ann Kelly on a project involving mechanisms that underlay neuronal regeneration. Inn-Inn participated fully in the lab activities and made a major contribution. Inn-Inn was selected from among 600 students and named to the third team of USA Today's All-USA College Academic Team. Inn-Inn was recognized for her work in repairing donated medical equipment for use in the developing world and for her role in the development of a solar-powered refrigerator to store vaccines. Most recently, Inn-Inn was awarded a Marshall Scholarship which will support her graduate work at Oxford University in the United Kingdom. The Marshall Scholarship program is highly competitive with only 40 given in the U.S. each year. Based on her experience here, Inn-Inn has also applied to the NIH-Oxford GPP to support the remainder of her D.Phil. program.

Lisa Bond (originally from Laurel, Maryland) is a senior biology major at the University of North Carolina at Chapel Hill who was a summer intern last year in the laboratory of Dr. James Sellers, working under the mentorship of Visiting Fellow Takeshi Sakamoto. At UNC, she was a National Merit Scholarship winner. This past summer she worked with and was able to demonstrate in vitro processive movement of the Ash1 mRNA transport system in yeast by myo2p directly from yeast cell extracts. She is currently doing an honors project at UNC which was presented at the 2006 American Society for Cell Biology Meeting and recently accepted for publication in *Current Biology*. Lisa is also a runner, having participated in

several 5K races and the Wilmington Battleship Half Marathon. She also has a purely artistic interest in black and white photography. Her photography won her a position as a finalist in the yearly art show at the Lorenzo de Medici Institute in Florence, Italy. Most recently, Lisa has been awarded a Churchill Scholarship to study for a Master's degree in Cambridge. Based on her experience here, Inn-Inn has also applied to the NIH-Cambridge GPP to support the remainder of her D.Phil. program.

Each laboratory at NHLBI is allocated one summer internship position. So if you are interested in mentoring someone, please contact your PI and let them know of your interest. You and your PI would then search the summer internship database to identify potential students. Jessica Llewellyn in the Office of Education is happy to help you in this process. We all look forward to an excellent group of interns this summer!



Come to the  
**Fellows Social Event**  
celebrating  
**Chinese New Year and  
Valentine's Day**

(Be Festive - Wear **RED!**)

**Wednesday, Feb 13th  
Noon to 1:30  
10/13S235**

## Jessica's Corner

**F**irst of all, a big "What's Up Welcome" to the Office of Education's newest part-time assistant, Aurora Taylor. She's a UMD student and helping this Program Coordinator BIG TIME! Stop by any time after 3 p.m. To say "Hey" to our newest team member.

Next up, the inspiration. Some of you know that when I'm not doing everything under the sun for you fine fellows, I'm helping out with my community service fraternity, Alpha Phi Omega or DJ-ing like a bandit (If bandits DJ'd that is...). But what you may not know is my passion for song and dance. It's something that I've let get away from me for the past few years - focusing on school and work and other stuff. But what I've realized is that it's time to change.

What I've learned is that the one thing that gives me true joy and peace is performing! When I dance - even when I don't get all the steps right - I feel so happy and free. When I sing - even if I don't get every note all at once - I am still ... Free.

I am determined to make this year about rekindling the passions I had when I was a kid and regaining that strength and confidence that 100% completes me as a person. I'm determined to do the things I love - because THAT'S what makes the things you don't love TEN times more bearable! Because of this new mission/ motivation, I've joined some

dance classes and really started focusing on my choir and of course my DJ life. And I can already feel a change in me =).

So what is it that YOU love to do my fine fellows? Whether it's writing children's stories, reading cheesy romance novels, running, rock climbing, deep sea diving, cooking, downloading music (legally I hope), doing hair, watching movies or WHAT EVER! - make sure it's something that YOU love doing! Not because it may one day benefit mankind or because someone else told you to - but because it is the one thing in life that will bring you absolute joy =) And don't just do it every once in a while - make it a routine - at LEAST twice a week! Put the world on hold and just "do you!"

I hope to see you doing whatever it is that you love to do at the next retreat where Aurora (the newest edition to the Office of Education team) and I will be waiting with registration materials, big smiles, and if you're lucky,

**FREE HUGS!**

*"Come on say "Oh! Oh! Get on the floor! Dance 'til you got no more!" I know it's there somewhere - Don't worry I'll be there! To rock the party all night - To rock it 'til there's light - our fists in the air fighting the good fight!  
- "Brat Pack," The Rocket Summer*

## Get Ready for RETREAT 2008!!

**March 13-14, 2008**

**Loews Annapolis Hotel**

### Speakers Include:

- Dr. Katherine A. High, Bennett Professor of Pediatrics & HHMI Investigator, Children's Hospital of Philadelphia
- Dr. Nina V. Fedoroff, Science & Technology Adviser to the Secretary of State, US Department of State
- Dr. Napoleone Ferrara, Genentech Fellow
- Alumni Career Presentations by Drs. Martin Crook (Merck) & Cynthia Ju (University of Colorado)

### New this year:

- Guests allowed! (at a separate cost)
- Walking Tour of Annapolis

### Other Retreat Features:

- TWO Scientific Poster Sessions
- Platform Talks by NHLBI Fellows and Alumni
- NHLBI Mentoring Awards (Nominations available online!)
- Fellows Poster Awards (Winners get a stipend increase!)
- The Return of Late Night Karaoke!

**Register Today!**

**<http://dir-intranet.nhlbi.nih.gov/oe/abstractsubmission>**

**New NHLBI Fellows**

**Benjamin Lelouvier, Ph.D.** is a Visiting Fellow in the Laboratory of Cell Biology under the mentorship of Dr. Rosa Puertollano. He received his Ph.D. in Cellular and Molecular Neurobiology from Paris VI University in Paris, France. Dr. Lelouvier will be working on protein trafficking while at the NHLBI.



**Sandeep Misra, Ph.D.** is a Visiting Fellow in the Laboratory of Kidney and Electrolyte Metabolism under the mentorship of Dr. Raghuram Viswanathan. He received his Ph.D. in Molecular and Structural Biology from the Central Research Institute in Lucknow, India. While at the NHLBI, Dr. Misra will be characterizing and identifying the interacting partners of human NHERF1.

**Recent Publications by NHLBI Fellows**

**Aliyu, Z. Y., Kato, G. J., Taylor, J., Babadoko, A., Mamman, A. I., Gordeuk, V. R., & Gladwin, M. T.** (2008). Sickle cell disease and pulmonary hypertension in Africa: A global perspective and review of epidemiology, pathophysiology, and management. *Am. J. Hematol.* 83, 63-70.

**Aune, C. N., Chatterjee, B., Zhao, X. Q., Francis, R., Bracero, L., Yu, Q., Rosenthal, J., Leatherbury, L., & Lo, C. W.** (2008). Mouse model of heterotaxy with single ventricle spectrum of cardiac anomalies. *Pediatr. Res.* 63, 9-14.

**Bessette, K., Lang, M. L., Fava, R. A., Grundy, M., Heinen, J., Horne, L., Spolski, R., Al-Shami, A., Morse, H. C., Leonard, W. J., & Kelly, J. A.** (2008). Stat5b transgene is capable of inducing CD8(+) lymphoblastic lymphoma in the absence of normal TCR/MHC signaling. *Blood* 111, 344-350.

**Forgacs, E., Cartwright, S., Sakamoto, T., Sellers, J. R., Corrie, J. E. T., Webb, M. R., & White, H. D.** (2008). Kinetics of ADP dissociation from the trail and lead heads of actomyosin V following the power stroke. *J. Biol. Chem.* 283, 766-773.

**Guttman, M. A., Ozturk, C., Raval, A. N., Raman, V. K., Dick, A. J., DeSilva, R., Karmarkar, P., Lederman, R. J., & McVeigh, E. R.** (2007). Interventional cardiovascular procedures guided by real-time MR imaging: An interactive interface using multiple slices, adaptive projection

modes and live 3D renderings. *J. Magn. Res. Imag.* 26, 1429-1435.

**Harrigan, J. A., Piotrowski, J., Di Noto, L., Levine, R. L., & Bohr, V. A.** (2007). Metal-catalyzed oxidation of the Werner syndrome protein causes loss of catalytic activities and impaired protein-protein interactions. *J. Biol. Chem.* 282, 36403-36411.

**Jobsis, P. D., Ashikaga, H., Wen, H., Rothstein, E. C., Horvath, K. A., McVeigh, E. R., & Balaban, R. S.** (2007). The visceral pericardium: macromolecular structure and contribution to passive mechanical properties of the left ventricle. *Am. J. Physiol. Heart Circ. Physiol.* 293, H3379-H3387.

**Laabs, T. L., Wang, H., Katagiri, Y., McCann, T., Fawcett, J. W., & Geller, H. M.** (2007). Inhibiting glycosaminoglycan chain polymerization decreases the inhibitory activity of astrocyte-derived chondroitin sulfate proteoglycans. *J. Neurosci.* 27, 14494-14501.

**Ledesma-Carbayo, M. J., Derbyshire, J. A., Sampath, S., Santos, A., Desco, M., & McVeigh, E. R.** (2008). Unsupervised estimation of myocardial displacement from tagged MR sequences using nonrigid registration. *Magn. Reson. Med.* 59, 181-189.

**Luo, S., McNeill, M., Myers, T. G., Hohman, R. J., & Levine, R. L.** (2008). Lon protease promotes survival of

*Escherichia coli* during anaerobic glucose starvation. *Arch. Microbiol.* 189, 181-185.

**Shi, Z. D., Wu, H., Ruddy, B., & Griffiths, G. L.** (2007). Imaging Probe Development Center: a National Institutes of Health core synthesis resource for imaging probes. *J. Biomed. Optics* 12.

**Tan, S. Y., Rosenthal, J., Zhao, X. Q., Francis, R. J., Chatterjee, B., Sabol, S. L., Linask, K. L., Bracero, L., Connelly, P. S., Daniels, M. P., Yu, Q., Omran, H., Leatherbury, L., & Lo, C. W.** (2007). Heterotaxy and complex structural heart defects in a mutant mouse model of primary ciliary dyskinesia. *J. Clin. Invest.* 117, 3742-3752.

**Taylor, J. G., Ackah, D., Cobb, C., Orr, N., Percy, M. J., Sachdev, V., Machado, R., Castro, O., Kato, G. J., Chanock, S. J., & Gladwin, M. T.** (2008). Mutations and polymorphisms in hemoglobin genes and the risk of pulmonary hypertension and death in sickle cell disease. *Am. J. Hematol.* 83, 6-14.

**Tilak, G. S., Hsu, L. Y., Hoyt, R. F., Arai, A. E., & Aletras, A. H.** (2008). In vivo T2-weighted magnetic resonance imaging can accurately determine the ischemic area at risk for 2-day-old nonreperfused myocardial infarction. *Invest Radiol* 43, 7-15.