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

October 2005 Fellows Newsletter

From the Director of the Office of Education:

First, our office has moved. We are now located in Building 10, Room 2N242. Come and visit!

All fellows are encouraged to attend a symposium on October 17th entitled "*Exploring the Mysteries of Myosin and Actin*" in honor of Dr. Edward Korn, head of the Cell Biology and Physiology Center, and pre-eminent researcher. This is an all-day event in Lipsett Auditorium. More information is available on the web at: http://www.nhlbi.nih.gov/meetings/korn.htm

Our Career Development Seminars speaker this month, on Tuesday, October 11th is Dr. Kay-Uwe Wagner, University of Nebraska who will talk about starting out in Academia. Dr. Wagner is a former NIH Fellow who can provide useful insights for those of you who are considering careers in Academic Research. In addition, save the date for the NHLBI Fellows Retreat, once again at Harbourtowne Resort, Thursday-Friday, April 27-28, 2006.

We invite all NHLBI fellows to participate in our activities, either by volunteering to help organize them or through your input to the Fellows Advisory Committee. A complete list of Advisory Committee member is on the web at: http://dir.nhlbi.nih.gov/oe/advisory.asp.

Finally, the leadoff article in this issue is entitled "*Networking*" that addresses issues about what networking can do for you. I'd love to hear from some of you who have wrestled with these issues.

Networking: How does it affect my life?

Dr. Herbert M. Geller, Director, Office of Education

The term "networking" is used for activities that are designed to increase ones circle of contacts and gather information that will help you in your pursuits. The underlying hypothesis is that networking efforts today will be rewarded at some time in the future. How well is this hypothesis supported by data?

As many of you know, I meet personally with each new fellow and each departing fellow. One of my standard questions to arriving fellows is "How did you find out about being a fellow at NIH?" Virtually all of you respond by saying "Someone I know is working or has worked at NIH and pointed me to this lab" or "I met my advisor at a meeting". Thus, most of our fellows have already benefitted from "networking". Likewise, when I ask departing fellows, most have found job leads through personal contacts that they or their advisors made. Thus, all the data support the benefits of networking.

While most of you have benefitted from networking in your research environment, there are also tangible benefits of chance encounters. I can give you several examples: The first is from the life of the keynote speaker at our 1st Retreat, Dr. Roy Vagelos. Dr. Vagelos retired from the Presidency of Merck and Company. But how did he get to Merck? Dr. Vagelos was born and raised in New Jersey, where his father owned a diner in Rahway, also the headquarters of Merck. Dr. Vagelos worked in the diner as a teenager, long before he became a successful scientist, and met many Merck executives who ate there. When the time came to hire a head of research, many had kept abreast of his career progress through medical school and then to Washington University where he was Chair of Biochemistry.

The second is my own experience. During summers, my family would rent a bungalow in a small colony at the shore. One year, the adjacent bungalow had a family with a teenage daughter, with whom

I became friendly. As it turns out, I had more in common with her father, a bioengineer, than his daughter. The next summer, he found a job for me in the Bioengineering Lab at Rockefeller University. I worked in a lab adjacent to that of Dr. H.K. Hartine, a Nobel prize winner for his studies of vision in horseshoe crabs using electrophysiological techniques. I was so enamored of his work, that I decided that this was the direction I would pursue in graduate school.

Finally, one of this year's retreat speakers noted that he is now working for someone at Wyeth-Ayerst who he met at NIH while both were fellows.

Based on these stories and data, "networking" merely means taking advantage of every opportunity to meet people. It does not mean that you have to be socially aggressive or make a nuisance of yourself. Whether you consider yourself outgoing or are shy, the process is the same and builds upon your innate talents and curiosity.

Instead of watching a WALS lecture by videocast, go to Masur and especially go to the reception afterwards. Prepare yourself with a question for the speaker so you can introduce yourself. Attend each of your interest group meetings and talk to the others at the group. Present a poster at the NHLBI Fellows Retreat where you can talk about your work to the other fellows at NHLBI. At your scientific meeting, don't go back to your room after dinner, but instead attend as many social functions as you can.

Much more information about networking is available on the web. Check out the Office of Education web site under "Career Development Resources" for useful links. Or simply Google "networking" and "science" for many interesting links.

New NHLBI Fellows

Ms. Diana Ackah recently joined the Cardiovascular Branch under the Biomedical Research Training Program for Underrepresented Groups (BRPUG) program under the supervision of Dr. Mark Gladwin. Ms. Ackah graduated from Delaware State University, Dover, Delaware with a B.S. in Biology in 2005.

Ms. Erika Cobar has joined the Laboratory of Biophysical Chemistry under the supervision of Dr. Bernard Brooks as a Predoctoral Fellow. Ms. Cobar earned her B.S. in Chemistry from the University of California, Davis, California in 2003. She has been a graduate student in Chemistry at the University of California, Berkeley since 2004.

Ms. Stacey Cromer joined the Laboratory of Biophysical Chemistry under the supervision of Dr. Nico Tjandra as a Postbaccalaureate IRTA Fellow. Ms. Cromer completed her B.S. in Chemistry at Lafayette College, Easton, Pennsylvania in May 2005. Ms. Cromer is working on determining the structure of the EIAV membrane protein.

Mr. Niccolo Fiorentino has recently joined the Laboratory of Cardiac Energetics under the supervision of Dr. Elliot McVeigh as a Postbaccalaureate IRTA Fellow. Mr. Fiorentino earned his B.S. in Engineering Sciences from University of Florida, Gainesville, Florida in 2004.

Ms. Nwakaego Inyamah has recently joined the Laboratory of Biochemistry under the supervision of Dr. Thressa Stadtman as a Postbaccalaureate IRTA. Ms. Inyamah received her B.S. in Chemistry from University of Pittsburgh, Pennsylvania in May 2005. She's working on purification of the SBP (Selenium Binding Protein) via different types of Column chromatography (anionic exchange, Hydrophobic interactions, and size exclusion). She's also performing

Come to the Career Development Seminars

Next Seminar:

Tuesday, October 11th, 12:00 Noon

Dr. Kay-Uwe Wagner

University of Nebraska

will speak on

Ins and Outs for Starting in Academia

electrophoresis to visually see process of purification in the protein.

Dr. Soo-Jin Park has joined the Laboratory of Biochemistry under the supervision of Dr. Rodney Levine as a Visiting Fellow. Dr. Park earned both his M.S. (1997) and Ph.D (8/2005) in Chemistry from Seoul National University. He will be working on understanding oxidative signaling.

Ms. Jessica Queen joined the Laboratory of Cell Biology under the supervision of Dr. Julie Donaldson as a Postbaccalaureate IRTA Fellow. Ms. Queen graduated with a B.S. n Biochemistry in May 2005 from Simmons College, Boston, Massachusettes. She's working on clathrin-independent endocytosis.

Dr. Christopher Yeung has recently joined the Laboratory of Cardiac Energetics under the supervision of Dr. Elliot McVeigh as an IRTA Fellow. Dr. Yeung earned his B.A.Sc., in Engineering Science from Unversity of Toronto, Canada in 1996. He then completed his Ph.D. in Biomedical Engineering at Johns Hopkins University, Baltimore, Maryland in 2002. He will be working on new techniques in cardiac MRI.

Mr. Adam Zwolak has recently joined the Laboratory of Biophysical Chemistry under the supervision of Dr. Nico Tjandra as a Predoctoral Fellow. Mr. Zwolak received his B.S. in Chemical Biology from Saint Joseph's University, Philadelphia, Pennsylvania in 2004. He is a member of the NIH-NYU GPP Program in Structural Biology.

Recent Publications by NHLBI Fellows

Aletras A. H., **Ingkanisorn W. P.**, Mancini C. and Arai A. E. (2005) Dense with Sense. *Journal of Magnetic Resonance* **176,** 99-106.

Arora G., **Klauda J. B.** and Sandler S. I. (2005) A comparative study of nitrogen physisorption on different C-70 crystal structures using an ab initio based potential. *Journal of Physical Chemistry B* **109,** 17267-17273.

Cai Q., Ferraris J. D. and Burg M. B. (2005) High NaCl increases TonEBP/OREBP mRNA and protein by stabilizing its mRNA. *Am. J. Physiol Renal Physiol* **289,** F803-F807.

Deans K. J., Minneci P. C., Hergen A. E., Hoehn G., **Suffredini A. F.** and Solomon M. A. (2005) Serum protein expression of acute cellular rejection in a rat heart transplant model. *American Journal of Transplantation* **5,** 479.

Donaldson J. G. and **Honda A.** (2005) Localization and function of Arf family GTPases. *Biochemical Society Transactions* **33,** 639-642.

Fodor E., Mack J. W., Maeng J. S., Ju J. H., Lee H. S., Gruschus J. M., Ferretti J. A. and Ginsburg A. (2005) Cardiac-specific Nkx2.5 homeodomain: Conformational stability and specific DNA binding of Nkx2.5(C56S). *Biochem.* **44,** 12480-12490.

Kato G. J., Martyr S., Blackwelder W. C., Nichols J. S., Coles W. A., Hunter L. A., Brennan M. L., Hazen S. L. and Gladwin M. T. (2005) Levels of soluble endothelium-derived adhesion molecules in patients with sickle cell disease are associated with pulmonary hypertension, organ dysfunction, and mortality. *Brit. J. Haematol.* **130,** 943-953.

Klauda J. B., Pastor R. W. and Brooks B. R. (2005) Adjacent gauche stabilization in linear alkanes: Implications for polymer models and conformational analysis. *Journal of Physical Chemistry B* **109,** 15684-15686.

Kristof A. S., Pacheco-Rodriguez G., **Schremmer B.** and Moss J. (2005) LY303511 (2-piperazinyl-8-phenyl-4H-1-benzopyran-4-one) acts via phosphatidylinositol 3-kinase-independent pathways to inhibit cell proliferation via mammalian target of rapamycin (mTOR)- and non- mTOR-dependent mechanisms. *Journal of Pharmacology and Experimental Therapeutics* **314,** 1134-1143.

Lee C. R., Koo B. M., Cho S. H., **Kim Y. J.,** Yoon M. J., Peterkofsky A. and Seok Y. J. (2005) Requirement of the dephospho-form of enzyme IIA(Ntr) for derepression of Escherichia coli K-12 ilvBN expression. *Molecular Microbiology* **58,** 334-344.

Mcleod C. J., Pagel I. and Sack M. N. (2005) The mitochondrial biogenesis regulatory program in cardiac adaptation to ischemia - A putative target for therapeutic intervention. *Trends in Cardiovascular Medicine* **15,** 118-123.

McVeigh E. R., Guttman M. A., Kellman P., **Raval A. N.** and Lederman R. J. (2005) Real-time, interactive MRI for cardiovascular interventions. *Academic Radiology* **12,** 1121-1127.

Minneci P. C., **Deans K. J.,** Yu E. A., Chen H., Hergen A. E., Aponte A. M., Logun C., Sittler K. J., Barb J. J., Munson P. J., Danner R. L. and Solomon M. A. (2005) Correlation of protein and gene expression profiles in a rat heart transplant model of acute celluar rejection. *American Journal of Transplantation* **5,** 480.

Montero A., **Savani B. N.,** Kurlander R., Read E. J., Leitman S. F., Childs R., Solomon S. R. and Barrett A. J. (2005) Lineage-specific engraftment and outcomes after T-cell-depleted peripheral blood stem cell transplant with Flu/Cy/TBI conditioning. *Brit. J. Haematol.* **130,** 733-739.

Natanzon A., Aletras A. H., Hsu L. Y. and Arai A. E. (2005) Determining canine myocardial area at risk with manganese-enhanced MR imaging. *Radiology* **236,** 859-866.

Patteson K. G., Trivedi N. and Stadtman T. C. (2005) Methanococcus vannielii selenium-binding protein (SeBP): Chemical reactivity of recombinant SeBP produced in Escherichia coli. *Proc. Natl. Acad. Sci. U. S. A* **102,** 12029-12034.

Toth J., Kovacs M., Wang F., Nyitray L. and Sellers J. R. (2005) Myosin V from Drosophila reveals diversity of motor mechanisms within the myosin V family. *J. Biol. Chem.* **280,** 30594-30603.

Walker D. L., Vacha S. J., Kirby M. L. and Lo C. W. (2005) Connexin43 deficiency causes dysregulation of coronary vasculogenesis. *Dev.Biol.* 284, 479-498.

Wu Y. X., Greene L. E., Masison D. C. and Eisenberg E. (2005) Curing of yeast [PSI+] prion by guanidine inactivation of Hsp104 does not require cell division. *Proc. Natl. Acad. Sci. U. S. A* **102,** 12789-12794.

Yang Y., Kovacs M., Xu Q., Anderson J. B. and Sellers J. R. (2005) Myosin VIIB from Drosophila is a high duty ratio motor. *J. Biol. Chem.* **280,** 32061-32068.

Published by the

Office of Education

NHLBI Division of Intramural Research

Dr. Herbert M. Geller, Director
Vicki Le, Program Assistant

Bldg. 10/2N242
301-451-9440

Volunteer for the Fellows Advisory Committee