



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

February 2005 Fellows Newsletter

From the Director of the Office of Education:

Career Development for Fellows is a major function of the Office of Education. I would like to take this opportunity to remind you of several of these. First, we have a monthly Career Development Seminar jointly sponsored by NHLBI and NIDDK. Our February speaker was Dr. Michael McCarthy of Medimmune who gave his perspective on Careers in Biotechnology. The next one is on March 8th, so watch your calendar.

The Fellows Retreat will be held on May 12-13th this year at the Harbortowne Conference Center. Our featured speakers are Richard P. Lifton M.D., Ph.D., Chairman, Department of Genetics, and Professor of Medicine (Nephrology), Genetics & Molecular Biophysics & Biochemistry, at Yale, and Lee Hood, M.D, Ph.D, President of the Institute of Systems Biology. In addition, we have a panel of experts who will talk about careers in Academia, Investment Banking, Government Research and the Pharmaceutical Industry. As usual, we will have a Poster session for you to present your research, and we will give two \$1000 Fellows Awards based on the research presented in the poster. In addition, we will have lots of time for social interactions. The web site will open for registration on March 1, and there are only a limited number of rooms, so please register and submit your poster as early as possible to guarantee your place.

As always, I am eager to hear from you about potential activities that you would like to have sponsored by our office.

Zebrafish Swimming at NHLBI by Marina Lee

A new member (more precisely, model organism) has joined NHLBI. Recently arrived in the laboratory of Dr. Ken Kramer are six breeding pairs of *Danio rerio*, commonly known as zebrafish. (With a little bit of luck and a lot of paper work there will be many more fish arriving). While this organism has been at the NIH for many years, these are the first fish to 'swim through the doors' of NHLBI, and will be hard at work helping to elucidate the roles of proteoglycans during early development.

For all those that have not had an occasion to cross paths with a zebrafish, adults are about two inches long and

skinny - as the maintenance men that installed the water system commented, "they would leave a piranha hungry". The fish are native to the tropics and thus get to reside in toasty warm 28°C salt water. For the first few days of life, embryos are transparent, and thus greatly facilitate experiments which require views of the inner workings. Transparent embryos also afford the opportunity, if one has the time

and the patience, to watch cells divide. I am told, although not seen for myself, that you can even watch individual blood cells travel throughout the circulatory system! After a couple days, the fish start to develop melanocytes, which will eventually give rise to the zebra stripes.

If you would like to meet our zebrafish or have any questions, feel free to stop by the Kramer Lab (10/6C104).



New NHLBI Fellows

Dr. Yunfeng Cheng is a Visiting Fellow who has recently joined the Hematology Branch under the supervision of Dr. Neal Young. Dr. Cheng earned her M.D. from West China University of Medical Sciences in 1996. She recently completed her Ph.D. in Hematology from the Chinese University of Hong Kong, China.



Dr. Erik Pierstorff received his B. S. in biology from Emory University, Atlanta, GA in 1996. He then completed his Pre-IRTA Fellowship at the Laboratory of Molecular Growth Regulation at NICHD, NIH. He earned his Ph.D. at the University of California, Berkeley in 2003. Dr. Pierstorff is currently working at the Laboratory of Biochemical Genetics as an IRTA Fellow under the supervision of Dr. Robert Kotin.



Dr. Benjamin Sy has recently joined the Pulmonary Critical Care Medicine Branch as a Clinical Fellow under the supervision of Dr. Joel Moss. Dr. Sy completed his M.D. in Medicine and Surgery from the University of Santo Tomas, Manila, Phillipines in 1997.



Dr. Gabriela Viteri is a Visiting Fellow who has recently joined the Laboratory of Biochemistry under the supervision of Dr. Earl Stadtman. Dr. Viteri earned her B.S. in Chemistry at the Universidad Central del Ecuador in Quito, Ecuador in 2000. She then completed her Ph.D. at Pontificia

Universidad Católica, Santiago, Chile in 2004.

**Recent Publications by NHLBI Fellows**

Chung M. C. and Kawamoto S. (2004) IRF-2 is involved in up-regulation of nonmuscle myosin heavy chain II-A gene expression during phorbol ester-induced promyelocytic HL-60 differentiation. *J. Biol. Chem.* **279**, 56042-56052.

Dmitrieva N. I. and Burg M. B. (2005) Hypertonic stress response. *Mutat. Res.* **569**, 65-74.

Hematti P., Hong B. K., Ferguson C., **Adler R.,** Hanawa H., Sellers S., Holt I. E., Eckfeldt C. E., Sharma Y., Schmidt M., von K. C., Persons D. A., Billings E. M., Verfaillie C. M., Nienhuis A. W., Wolfsberg T. G., Dunbar C. E. and **Calmels B.** (2004) Distinct genomic integration of MLV and SIV vectors in primate hematopoietic stem and progenitor cells. *PLOS Biol.* **2**, 2183-2190.

Khakoo A. Y. and Finkel T. (2005) Endothelial progenitor cells *. *Annu. Rev. Med.* **56:79-101.**, 79-101.

Kruth H. S., Jones N. L., Huang W., **Zhao B.,** Ishii I., Chang J., Combs C. A., Malide D. and Zhang W. Y. (2005) Macropinocytosis is the endocytic pathway that mediates macrophage foam cell formation with native low density lipoprotein. *J. Biol. Chem.* **280**, 2352-2360.

Larson A. C., Kellman P., Arai A., **Hirsch G. A.,** McVeigh E., Li D. B. and Simonetti

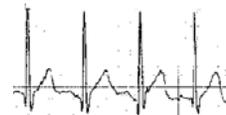
O. P. (2005) Preliminary investigation of respiratory self-gating for free-breathing segmented cine MRI. *Magn. Reson. Med.* **53**, 159-168.

Sakamoto T., Limouze J., Combs C. A., Straight A. F. and Sellers J. R. (2005) Blebbistatin, a myosin II inhibitor, is photoinactivated by blue light. *Biochemistry* **44**, 584-588.

Wasserman B. A., Casal S. G., Astor B. C., Aletras A. H. and Arai A. E. (2005) Wash-in kinetics for gadolinium-enhanced magnetic resonance imaging of carotid atheroma. *J. Magn. Reson. Imag.* **21**, 91-95.

Yu Q., Shen Y., **Chatterjee B.,** Siegfried B. H., Leatherbury L., Rosenthal J., Lucas J. F., Wessels A., Spurney C. F., **Wu Y. J.,** Kirby M. L., Svenson K. and Lo C. W. (2004) ENU induced mutations causing congenital cardiovascular anomalies. *Development* **131**, 6211-6223.

Zeng R., Spolski R., Finkelstein S. E., Oh S. K., Kovanen P. E., Hinrichs C. S., Pise-Masison C. A., Radonovich M. F., Brady J. N., Restifo N. P., Berzofsky J. A. and Leonard W. J. (2005) Synergy of IL-21 and IL-15 in regulating CD8(+) T cell expansion and function. *J. Exptl. Med.* **201**, 139-148.



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