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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.

Office of Education, DIR, NHLBI
Herbert M. Geller, Ph.D., Director
Jessica M. Llewellyn, MBA, Coord.
Building 10, Room 2N242
DIREDucation@nhlbi.nih.gov
Tel: 301-451-9440

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From the Director of the Office of Education

First of all, the Office of Education wishes you all an enjoyable Holiday Season and a Happy and Healthy New Year.

As you all know, the Combined Federal Campaign is an annual event during this season. This campaign collects money for many different charitable and non-profit organizations with goals ranging from fighting poverty, providing literacy classes, to protecting the environment. Fellows are eligible to donate; every contribution, no matter how small, makes a difference to someone. So if you wish to donate, contact your lab/branch CFC representative; if you are not sure who they are, you can contact Jessica, who will assist you.

Get ready for the NHLBI Fellows Retreat in Annapolis, MD, on **March 13-14**. Registration will open on **January 2nd**. This year, we have three outstanding speakers: scientific talks by Dr. Katherine A. High, Howard Hughes Investigator and Professor of Pediatrics at the Children's Hospital of Philadelphia and Dr. Napoleone Ferrara, Genentech Fellow. The keynote speaker will be Dr. Nina Fedoroff, Science and Technology Advisor to the US Secretary of State. In addition, we'll have return visits from two former Fellows to talk about their experiences in Academia and Industry. As usual, Postdoctoral and Graduate student winners of the Poster competition will receive stipend increases. For more information check out the Retreat Web Site.

Finally, our last Career Development Speaker of the year will be on **Tuesday, December 18th**. Dr. Marion Danis of the Department of Clinical Bioethics talking about Careers in Bioethics. Needless to say, bioethics is an increasingly important topic in the era of genetic and personalized medicine, and I encourage you to learn about it.



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

Is There Gender Bias for Women & What Can Be Done About It?

By
Herbert M. Geller, Ph.D.

The U. S. National Academy of Sciences recently released a report entitled "Beyond Bias and Barriers" that considers the present state of women in Academic Science and Engineering. The first part of the report consists of an assessment of the present status, while the later parts of the report address potential underlying causes and ways to address them.

One of the major findings of this report was that, at every level of education, there are fewer women in science and engineering. This difference becomes most apparent at the transition from postdoctoral fellow to starting faculty member, and persists thereafter. The experience of NHLBI appears to follow this trend: of NHLBI fellows who have recently left for faculty positions, over 80% are male, despite the fact that nearly 40% of our postdoctoral fellows are female (for a list of recent fellows, see the OE Web site at (<http://dir.nhlbi.nih.gov/oe/success.asp>.) Our own NHLBI DIR tenure-track faculty are similarly 80% male. The question then arises as to the origins of this disparity, and what can be done to correct it.

One obvious observation is that most of our fellows have families, with both adults working, and it is often the female member of the couple that assumes the burden of childcare. Following childbirth, fellows generally take time off to establish relationships with their newborns and to establish a routine that permits success at work. However, the mother generally remains out of the laboratory for a considerably longer time than the father. Since most

fellows cannot afford full-time nannies, infant child care generally becomes the mother's responsibility.

In addition, if the baby is being nursed, this is clearly a responsibility of the mother. So there is an immediate disparity, which can result in a decrease in productivity. Another issue that arises is that many women find that they prefer to be home with their children during their formative years, and research skills quickly go out of date if not used. Many institutes at NIH (but not NHLBI) have special grants to fund scientists who are returning from a family leave. Interestingly, the report also found that while women take more time off early in their careers, men take significantly more sick leave than do women.

How do successful women cope with these challenges? First is having a commitment to your career. Second, having a supportive partner who will share the domestic workload is essential. Third, fellows who are parents have to be very organized in terms of time management: experiments are planned so that time is not wasted, and lab time is used efficiently. On the positive side, being in an academic environment affords flexibility in work hours for parents to plan their work schedule around family events.

Another issue highlighted in the report is the criteria used by search committees to choose faculty members. While future research success is the primary criterion, the report suggested that many factors considered by search committees to predict success reflect predominantly male stereotypical characteristics. Thus, qualities such as assertiveness and single-mindedness are given higher weight than those of curiosity, motivation and dedication. In contrast, women who are considered assertive are often penalized as being abrasive. In fact, this criteria may also

penalize many foreign fellows whose skills in teamwork are often overlooked. Our workshops on negotiating skills and dealing with conflict are appropriate mechanisms for fellows to learn how to deal with these issues.

Finally, the report emphasized the importance of networking and mentoring for career success. Networking means constantly expanding your circle of scientific contacts. There are many different venues to do this, but the most obvious are to attend and participate in scientific events both on and off campus. Thus, fellows should attend and participate in seminars sponsored by groups outside their own laboratory, such as the Interest Groups. They should present their research at the NIH Research Festival, the NHLBI Retreat, and at national scientific meetings. Participation in social events is a very effective way of meeting new people.

Every fellow should have one or more mentors to guide them in their career choices and issues. While fellows use their research supervisor as their primary mentor, most fellows will benefit if they have multiple mentors with overlapping interests and specialties. In addition, having a mentor whose research program does not depend upon your achievements enables a more open discussion of career options. The report emphasized the additional importance for women to have a female mentor who has faced many of the same issues.

Of course, these problems do not go away once you obtain a faculty position, but having addressed them early improves the chances of long-term success.

New NHLBI Fellows



while at the NHLBI.

Eszter Kengyelne Fodi, M.D., Ph.D. is a research fellow in Roderick Pettigrew's lab. She received her M.D. and Ph.D. from the University of Pécs in Hungary. Dr. Kengyelne will be working on atherosclerosis imaging in animal models



at the NHLBI, he will be working with modulation of focal adhesion assembly and turnover by external force.

Sergey Plotnikov, Ph.D. is a new fellow in the laboratory of cell and tissue Morphodynamics under the mentorship of Dr. Clare Waterman. He received his Ph.D. in Developmental Biology from the Institute of Marine Biology in Vladivostok, Russia.



at the NHLBI, Dr. Topanurak will be working on post-translational modification of protein of interest.

Supachai Topanurak, Ph.D. is a new visiting fellow in the Laboratory of Kidney and Electrolyte Metabolism under the supervision of Dr. Maurice Burg. He received his Ph.D. in Biochemical



working on cancer gene therapy using AAV-TRAIL while at the NHLBI.

Jinsang Yoo, Ph.D. is a new visiting fellow in the Laboratory of Biochemical Genetics under the mentorship of Dr. Robert Kotin. He received his Ph.D. in Genetic Engineering from Sungkyunkwan University in Korea. Dr. Yoo will be

Jessica's Corner

Ah the holidays. A time for tinsel, garland and lights everywhere you go. Let's not forget the abundance of some pretty awesome holiday music (Rockapella's Christmas Concert anyone?). But of course you know, the spirit of the holiday season is more than gift giving and decorations. It is about peace on earth and goodwill towards man. For example, donating to the CFC or giving toys to the annual Toys for Tots program.

During this time of year, there always seems to be a general light and happiness in everyone's eyes. Maybe it is because of all the fun holiday parties or the anticipation of presents – or even the knowledge that a much needed week off is coming! But I believe that it is because it's the one time of year when you can go outside and see lights in Bethesda, DC, NY and Hawaii. People just seem to be filled with this awesome glow and sense of joy.

As you're gathered around your holiday tree, sipping hot cocoa and eating cookies, I hope you'll remember the words of my favorite boy band of all time, Nsync:

"No matter what your holiday, it's a time to celebrate. Put your worries aside and open up your mind. See the world right by your side. It's Christmastime."

Next Career Development Seminar

Tuesday, 12/18 @ Noon in 10/13S235

Featuring

Careers in NIH Bioethics

Recent Publications by NHLBI Fellows

Basu, S., Grubina, R., Huang, J., Conradie, J., Huang, Z., Jeffers, A., Jiang, A., He, X., Azarov, I., Seibert, R., Mehta, A., Patel, R., King, S. B., Hogg, N., Ghosh, A., Gladwin, M. T., & Kim-Shapiro, D. B. (2007). Catalytic generation of N₂O₃ by the concerted nitrite reductase and anhydrase activity of hemoglobin. *Nat. Chem. Biol.* 3, 785-794.

Duncan, B. & Zhao, K. (2007). HMGAI mediates the activation of the CRYAB promoter by BRG1. *DNA and Cell Biology* 26, 745-752.

Pacheco-Rodriguez, G., Steagall, W. K., Crooks, D. M., Stevens, L. A., Hashimoto, H., Li, S., Wang, J. A., Darling, T. N., & Moss, J. (2007). TSC2 loss in Lymphangiomyomatosis cells correlated with expression of CD44v6, a molecular determinant of metastasis. *Cancer Res.* 67, 10573-10581.

Yeung, C. J., Karmarkar, P., & McVeigh, E. R. (2007). Minimizing RF heating of conducting wires in MRI. *Magn. Reson. Med.* 58, 1028-1034.