



MINNIM



Volume 21, Issue 1

BIOCHEMISTRY NEWSLETTER

December/January 2007

CHAIRMAN'S CORNER

Happy New Year!!

I hope that the worst is over for the New Year and that we will now be able to move forward. We have learned that academic excellence, like a card castle, is quite fragile. No matter how the factors destroying the castle are mutually unrelated, they synergistically affect each other to cause a devastating effect. I feel that all the problems of UMDNJ and our Medical School came upon us like an earthquake, which we were unable to prevent. You may remember the terrible earthquake at Kobe in 1995, which killed more than 5,500 people and destroyed my hometown to rubble. After 10 years, Kobe has completely recovered and has resumed her place as a beautiful cosmopolitan port town. One can hardly see any scars from the disaster.

The focus of this amazing recovery is twofold: (1) The enthusiasm of the people of Kobe for recovery and (2) financial backing. Most definitely, we will still maintain our enthusiasm in the Department and our Medical School. So how can we stand up to rebuild our Department? We certainly can not endure any more state budget cuts. We can not rebuild our academic excellence with a 15% (\$265,211 this year) budget cut per year. Once our Departmental budget is stabilized, our upward mobility has to be supported by external funding. In this regard, I have good news to share. New Grants awarded in 2006: Ray Habas (RO1); Barbara Brodsky (R21); Kiran Madura (RO1 renewal); Kiran Chada (NJCST); Monica Roth (NJCST); and I have been awarded a DOD grant. A number of faculty have submitted competitive renewals: Smita Patel (NIH), Mike Hampsey (NIH) and Ray Habas (MOD). Various faculty have submitted new grants totaling \$6,038,592. Our endowment from Takara Bio., Inc. will help us take another important step towards stability. This endowment has increased to about \$2.4M, generating approximately \$120,000 (5%) per year. I will certainly make every effort to obtain more endowments which, hopefully, will generate another \$3M-4M for our Department.



Another important source of income for our Department is royalties generated from licensing and patents. Last year our Department received a total of \$61,993. I hope these royalties will be a major source of income, generating a few hundred-thousand a year in the future.

Let's work together to rebuild our academic excellence and reputation. I know we can be successful!

Publications

Inouye, M. (2006) The discovery of mRNA interferases: Implication in bacterial physiology and application to biotechnology. *J. Cell. Physiol.* 209(3):670-6.

Liou, H.L., Dixit, S.S., Xu, S., Tint, G.S., **Stock, A.M.** and Lobel, P. (2006) NPC2, the protein deficient in Niemann-Pick C2 Disease, consists of multiple glycoforms that bind a variety of sterols. *J. Biol. Chem.* 281(48):36710-36723.

Suzuki, M., Roy, R., Zheng, H., Woychik, N. and **Inouye, M.** (2006) Bacterial bioreactors for high yield production of recombinant protein. *J. Biol. Chem.* 281(49):37559-65.

Perez, E. and **Stock, AM.** (2006) Characterization of the *Thermotoga maritime* chemotaxis methylation system that pentapeptide-dependent methyltransferase CheR:MCP tethering. *Mol. Microbiol.* 63(2):363-78.

(continued on page 4)

Departmental News

Masayori Inouye presented seminar entitled, "Bacterial Suicide Genes: Their Function, Implication and Application" at the Sumitomo Chemical Co., Ltd in Japan on November 13, 2006 and at the Academia Sinica in Taiwan on November 17, 2006.

Kiran Chada was featured in the UMDNJ Magazine (Fall 2006 Vol. 3 No. 2) discussing, "Why is Obesity Epidemic."

Lizbeth Romero-Pérez (Dr. K. Madura) presented her dissertation, "Sts1: A novel regulator of protein degradation by the ubiquitin/proteasome system" on December 6, 2006.

John Togneri (Dr. C. Carr) presented his dissertation, "Purification of Sec1p from yeast and characterization of the Sec1p-Snare Complex" on December 19, 2006.

Michael Scher (Dr. D. Reinberg) presented his dissertation, "Studies on the Human SIR2 Homologues SIRT1, SIRT2 and SIRT3" on January 16, 2007.



Congratulations to the winners of our Annual Ornament Contest

1st Place: **Masayori Inouye**

2nd Place: **Nancy Woychik's lab**

3rd Place: **Swaroop Paratkar** (Smita Patel's Lab) and **Koiche Inouye** (Masayori Inouye Lab)

Worst: **Monica Roth** - Letter from Santa

(see page 3 for entries):



1st Place: Masayori Inouye - Christmas Extravaganza Turkey Rockettes



2nd Place: Nancy Woychik's Lab - Santa at the North Pole



Disqualified Sangita Phadtare - Santa on a Magic Carpet



3rd Place: Swaroopa Paratkar - Cheesecloth Doll



3rd Place: Koiche Inoue - Rudolph the Red-Nosed Reindeer

Publications (continued from page 2):

Forouhar, F., Anderson, J.L., Mowat, C.G., Vorobiev, S.M., Hussain, A., Abashidze, M., Bruckmann, C., Thackray, S.J., Seetharaman, J., Tucker, T., Xiao, R., Ma, L.C., Zhao, L., Acton, T.B., **Montelione, G.T.**, Chapman, S.K. and Tong, L. (2006) Molecular insights into substrate recognition and catalysis by tryptophan 2,3-dioxygenase. *Proc. Natl. Acad. Sci. USA*. 104(2):473-8.

Epigenetics. Edited by C. David Allis, Thomas Jenuwein and **Danny Reinberg**. Cold Spring Harbor Laboratory Press, 2007.

In Press:

Bhattacharya, A., Rejero, R. and **Montelione, GT**. (2006) Evaluating protein structures determined by structural genomics consortia. *Proteins*.

Submitted:

Simmons, M.J., Fan, G., Zong, W.X., Degenhardt, K., White, E. and **Gélinas, C**. (2006) Bfl-1/A1 functions, similar to Mcl-1, as a selective tBid and Bak antagonist.

Friedland, N., Mack, T.R., Yu, M., Hung, L.-W., Terwilliger, T.C., Waldo, G.S. and **Stock, A.M**. (2007). Domain orientation in the inactive response regulator Mycobacterium tuberculosis MtrA provides a barrier to activation. *Biochemistry*.