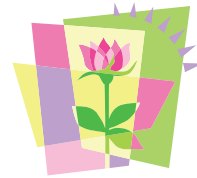




MINIM



Volume 20, Issue 3

BIOCHEMISTRY NEWSLETTER

March 2006

CHAIRMAN'S CORNER

Time for Term Limits

We learned this month that our long-standing NIH Training Grant, which currently supports five students in the Program in Biochemistry and Molecular Biology, will not be renewed. One criticism cited by the review panel was the excessive time-to-degree for too many of our students.

It's time to seriously reconsider a fixed-term PhD program. Several years ago I proposed a structured, fixed-term program that would require students to defend their thesis and graduate by June 30th of the 4th year. Two key elements of this program are the following:

- **Thesis Advisory Committee:** A student advisory committee must be assembled following completion of the Written (Qualifier) Examination and no later than September 1st at the start of Year 2.
- **Bi-annual Advisory Committee Meetings:** Students must meet with their Thesis Advisory Committee every six months to discuss past progress and short- (prior to the next meeting) and long-term goals. This requirement would be strictly enforced with no student being allowed to register for the next semester without a committee meeting during the preceding six months.



As Student Advisor for the past eight years, I have met bi-annually with every student in our Program, mainly to provide advice and oversight regarding progression through the degree requirements. The consistent complaint that I have received from these students is the feeling that the end is never in sight. Many have complained about a lack of oversight and the feeling that they are languishing in graduate school. When queried about the possibility of a fixed-term program, the response has been resoundingly favorable. Most students conceded that they would work much harder knowing that they must be done in four years.

It's time to give serious consideration to a fixed-term PhD program. Such a program would, of course, include some drawbacks and there would have to be a degree of flexibility built into the deadlines. Nonetheless, the advantages of a 4-year (or even 5-year) fixed-term program are certain to outweigh the drawbacks. At the very least, recovery of our NIH Training Grant might be dependent upon this change.

Written by Dr. Mike Hampsey

Seminars/Meetings

Danny Reinberg was invited to speak at the University of California, San Francisco's Seminar Series on Tuesday March 14, 2006. The title of his talk is "Chromatin and Its Impact on Gene Expression and Cellular Memory"

Smita Patel gave a talk on February 24, 2006 at the Chemistry department of Rutgers University, Newark on "Mechanisms of helicases and polymerases."

Guy Montelione gave a plenary lecture at the "International Keystone Meeting in Structural and Functional Genomics" in Keystone CO, on Feb 1, 2006.

Publications

Li, G.Y., Zhang, Y., Chan, M.C., Mal, T.K., Hoeflich, K.P., **Inouye, M.** and Ikura, M. (2006) Characterization of dual substrate binding sites in the homodimeric structure of *Escherichia coli* mRNA interferase MazF. *J. Mol. Biol.* **357**(1):139-50.

Forouhar, F. Hussain, M., Farid, R., Benach, J., Abashidze, M., Edstrom, W.C., Vorobiev, S.M., Ziao, R., Acton, T.B., Fu, Z., Kim, J.J., Mizioro, H.M., **Montelione, G.T.** and Hunt, J.F. (2006) Crystal Structures of Two Bacterial 3-Hydroxy-3-methylglutaryl-CoA Lyases Suggest a Common Catalytic Mechanism among a Family of TIM Barrel Metalloenzymes Cleaving Carbon-Carbon Bonds. *J. Biol. Chem.* **281**(11):7533-45.

Liu, G., Shen, Y., Xiao, R., Acton, T., Ma L.C., Joachimiak A., **Montelione G.T.** and Szyperski T. (2006) NMR structure of protein yqbG from *Bacillus subtilis* reveals a novel alpha-helical protein fold. *Protein.* **62**(1): 288-91.

Huang, Y-J., Tejero, R., Powers, R., and **Montelione, G.T.** (2006) A topology-constrained distance network algorithm for protein structure determination from NOESY data. *Proteins.* **62**(3):587-603.

Baran, M., Moseley, H.N., Aramini, J.M., Bayro, M.J., Monleon, D., Locke, J.Y. and **Montelione, G.T.** (2006) SPINS: A laboratory information management system for organizing and archiving intermediate and final results from NMR protein structure determinations. *Proteins.* **62**(4):843-51

In Press:

Phadtare, S., Tadigotla, V., Shin, W-H., Sengupta, A and Severinov, K. (2006) Analysis of *Escherichia coli* global gene expression profiles in response to overexpression and deletion of CspC and CspE. *Journal of Bacteriology.*

Kornhaber, G.J., Snyder, D., Moseley, H.N.B. and **Montelione, G.T.** (2006) Identification of zinc-ligated cysteine residues based on ¹³Ca and ¹³Cβ chemical shift data. *J. Biomol. NMR.*

