



MINIM



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CHAIRMAN'S CORNER

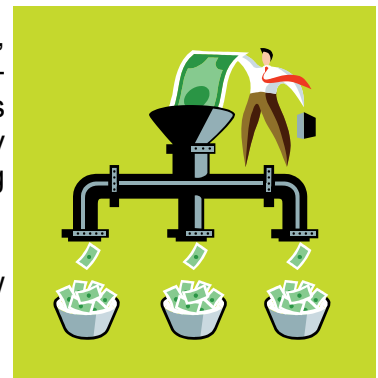
Research Funding Possibilities

Written by Kiran Chada

As we all know by now, we are about to lose two of our departmental faculty members in the next couple of months. The current Chairman originally hired them in the first wave of appointments and so this only leaves myself, Monica and Sumiko (and Barbara from the previous regime) from those days (when beer cost only five cent).

As stated by Barbara at a previous departmental faculty meeting, this is the opportune time for us to discuss the direction of our academic pursuits and the resources that are required to achieve this goal. This is part of the inner turmoil at our University, specifically with the increased competition for support from our major funding organization, which is the National Institutes of Health.

A number of possibilities must be explored in the light of these new conditions:



1. NIH will continue to be the mainstay of our funding. However, there is not only the traditional independent initiated RO1 but also:
 - A. RO1s that are responsive to specific program announcements. These are often less competitive and the aims of the announcement may not be as restrictive as described. This can often be clarified with the NIH staff member in charge of the RFA, who I have found to be very helpful.
 - B. The R21's which are for innovative ideas and have a two-year, \$275,000 budget. Not to be sniffed at in these days and usually consists of 15 rather than 25 pages for the research proposal.
 - C. Program project grants. On the administrative side, these are sent under the auspices of a program announcement or requested by a specific institute (after some prodding by the investigator). In my opinion, the ONLY way for success is to have a single individual in charge. She or he will be responsible for all aspects of the grant, from being the major intellectual impetus, the visionary and the photocopying. I have never known a successful program project grant to arise from a discussion. It is not a light undertaking but there must be resources from the department or institution to assist in the submission. This will be mainly on the administrative aspect but does consume a large amount of time.

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Publications

Perez, E., Zheng, H. and **Stock, A.M.** (2006) Identification of Methylation Sites in *Thermotoga maritime* Chemotaxis Receptors. *J. Bacteriol.* 188(11):4093-100.

Guhaniyogi, J., Robinson, V.I. and **Stock, A.M.** (2006) Crystal Structures of Beryllium Fluoride-free and Beryllium Fluoride-bound CheY in Complex with the Conserved C-terminal Peptide of CheZ Reveal Dual Binding Modes Specific to CheY Conformation. *J. Mol. Biol.* 359(3):624-45.

Chen, L. and **Madura, K.** (2006) Evidence for distant functions for human DNA repair factors hHR23A and hHR23B. *FEBS Lett.* 580(14):3401-8.

Mohs, A., Popiel, M., Li, Y., Baum, J. and **Brodsky, B.** (2006) Conformational Features of a Natural Break in the Type IV Collagen Gly-X-Y Repeat. *J. Biol. Chem.* 281(25):17197-202.



In Press:

Degenhardt, K., Mathew, R., Beaudoin, B., Bray, K., Anderson, A., Chen, G., Mukherjee, C., Shi, Y., **Gelinas, C.**, Fan, Y., Nelson, D., Jin, S. and White, E. (2006) Autophagy promotes tumor cell survival and restricts necrosis, inflammation and tumorigenesis. *Cancer Cell.*

Fan, Y., Dutta, J., Gupta, N., Fan, G. and **Gelinas, C.** (2006) Regulation of programmed cell death by NF- κ B and its role in tumorigenesis and therapy, in Programmed cell death in cancer progression and therapy. R. Khosravi-Far, and E. White, eds. Springer: The Netherlands.

Pegman, P.M., Smith, S.M., D'Souza, B.N., Loughran, S.T., Maier, S., Kempkes, B., Cahill, P.A., Simmons, M.J., **Gelinas, C.** and Walls, D. (2006) The Epstein-Barr virus nuclear antigen 2 trans-activates the cellular anti-apoptotic bfl-1 gene by a CBF-1/RBPJK dependent pathway. *J. Virol.*

Dutta, J., Fan, Y., Gupta, N., Fan, G. and **Gelinas, C.** (2006) Current insights into the regulation of programmed cell death by NF- κ B. *Oncogene.*

Departmental News

Kiran Madura and Li Chen (co-PI) were awarded a grant for \$15,000 from the NIEHS Center for Environmental Health Sciences pilot project entitled, "Investigating the Role of the Ubiquitin/Proteasome Pathway in Melanoma" for a period of 7/1/06-6/30/07.

Kiran Madura (co-PI: S. Roy of ProFACT Proteomics, New Brunswick, NJ) was awarded a grant for \$128,000 from the New Jersey Commission on Science and Technology Partnering Grant entitled, "Cancer-specific manifestations of the Ubiquitin/Proteasome pathway" for the period of 7/1/06-12/31/06.

Congratulations to **Eduardo Perez** and **Jayita Guhaniyogi** (both graduate students in Ann Stock's lab) on their award of New Jersey Commission on Science and Technology Postdoctoral Fellowships. Details are available at http://www.umdnj.edu/umcweb/marketing_and_communications/publications/enews/enews.html



Celine Gelinas was awarded a grant from the New Jersey Commission on Cancer Research entitled, "The Role of CAPERa in ERa and NF- κ B activity in breast cancer" beginning 7/1/06-6/30/08.

Celine Gelinas submitted a grant application (\$400,000 requested) to the New Jersey Commission on Spinal Cord Research to study "NF- κ B in inflammation, cell death and regeneration after SCI" for a proposed project period of 12/15/06-12/14/08.

Mike Hampsey served on an NSF panel to evaluate grant applications to the Frontiers in Biological Research (FIBR) Program in Arlington, VA, May 22-23, 2006.

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2. Private Foundations and State Grants

These tend to be focused on a specific area or disease indication. However, do not hesitate to apply if you can make a sensible application of your studies to their research focus. If there is a valid argument for the research towards their goals, many foundations take pride that they have funded "an off the wall idea".

There is much debate on resources being obtained from patents and licensing. I would most definitely encourage all investigators to patent their results if they believe there is a possibility of a modicum of commercial exploitation. The writing and submission of the patent will take relatively little time and is straightforward. HOWEVER, submission (or even the award) of a patent is NOT the same as a revenue stream. It is only the first step of a long and difficult climb which can only be taken, at this institution, by the investigator. The patents and licensing office are too stretched to try to exploit the investigator's patent and ALL the responsibility belongs to the investigator. In my experience, to succeed, this will require as much time as an RO1. Why bother? Well, the game can only be played if you know the rules and the first rule in the commercial sector is intellectual property protection.

- ## 3. Collaborations with the private sector.
- By far and away the best method is through a personal network. Ex-graduate students, postdoctoral fellows and peers who have gone into the private sector can be contacted. One advantage is that there is a fairly quick response. If there isn't, the answer is no. DON'T BE NAIVE. The private sector is only interested in making money and so the project will have a major commercial outlook. They are NOT going to fund straight academic research unless they are convinced of the commercial possibilities. Should we entertain this compromise? That is for the individual but remember, it is probably 3-4 times cheaper to perform research in an academic environment as compared to the commercial arena. So, if you double the required budget, this is still 50% cheaper than the equivalent research being performed in the private sector.

Most of us are already aware of these options. I have given my bias towards the probability of success for some of them but of course, this will be different for each individual investigator. GOOD LUCK!

