

Jawaharlal Nehru Centre for Advanced Scientific Research, Transcription and Disease Laboratory, Molecular Biology and Genetics Unit, Bangalore

We invite applications for the position of Research Associate/Post Doctoral Fellow from bright organic chemists who want to explore their interest and gain expertise in the field of Chemical Biology/Nanobiotechnology focusing in the area of gene expression in human diseases. The project is funded by the Department of Biotechnology, Government of India and titled: '**Nanoparticles: targeting protein lysine acetylation in oral cancer and neurodegenerative disorders using nanomaterial**'.

Qualifications: M.Sc., Chemistry (preferably organic chemistry), Ph.D. with organic chemistry specialization. Candidate should have consistent first class academic qualifications and must have a good academic record with publications in reputed international journals.

Preference: The candidate should be able to isolate natural compounds, derivatize and synthesize these compounds based on the *in silico* approach. Prior experience of handling nanomaterials will be an added advantage.

Candidates may peruse the following references for better insight into the work they will undertake in our laboratory.

1. Mantelingu, K., Reddy, B. A., Swaminathan, V., Kishore, A. H., Siddappa, N. B., Kumar, G. V., Nagashankar, G., Natesh, N., Roy, S., Sadhale, P. P., Ranga, U., Narayana, C. and Kundu, T. K. (2007), Specific inhibition of p300-HAT alters global gene expression and represses HIV replication. *Chem. Biol.*, 14(6): 645–657.
2. Selvi, B. R., Batta, K., Kishore, A. H., Mantelingu, K., Varier, R. A., Balasubramanyam, K., Pradhan, S. K., Dasgupta, D., Sriram, S., Agrawal, S. and Kundu, T. K. (2010), Identification of a novel inhibitor of CARM1-mediated methylation of histone H3R17. *J. Biol. Chem.*, 285(10): 7143–7152.
3. Arif, M., Pradhan, S. K., Thanuja, G. R., Mantelingu, K., Vedamurthy, M., Dasgupta, D. and Kundu, T. K. (2009), Mechanism of p300 specific histone acetyltransferase inhibition by small molecules. *J. Med. Chem.*, 52(2): 267–277.
4. Jagadeesan, Selvi, Suma, B. S., Nagashankar, G., Arif, M., Balasubramanyam, K., Eswaramoorthy, M. and Kundu, T. K. (2008), Intrinsically fluorescent carbon nanospheres as a nuclear targeting vector: delivery of membrane-impermeable molecule to modulate gene expression *in vivo*. *Nano Lett.*, 8(10): 3182–3188.
5. Selvi, B. R., Chatterjee, S., Jagadeesan, D., Chaturbedy, P., Suma, B. S., Eswaramoorthy, M. and Kundu, T. K. (2012), ATP driven Clathrin dependent entry of carbon nanospheres prefer cells with glucose receptors. *J. Nanobiotechnology* (in press).

Patents:

1. Title of the Invention: Modulators (Inhibitors/Activators) of Histone Acetyltransferases.
Inventors: Kundu, T. K., Balasubramanyam, K. and Swaminathan, V.
US Patent No. 7332629 B2, Date of Patent Grant: 19/2/2008
2. Title of the Invention: Polyhydroxy Derivatives of [2,3,7,8-Tetrahydroxyl(1) Benzopyrano (5, 4, 3 (DE) (1) Benzopyran 5,10-Dione) as a Novel, Specific Inhibitors of Histone Methyltransferase (Hmtase) and its Uses Thereof
Inventors: Kundu, T. K., Selvi, B. R., Kishore, A. H. and Mantelingu, K.
US Patent No. 7875741, Granted on 25/01/2011

Emoluments: As per JNCASR norms.

Interested candidates may submit their complete bio-data and duly attested copies of certificates to:

Prof. Tapas K. Kundu, Ph.D.
Transcription and Disease Laboratory,
Molecular Biology and Genetics Unit,
Jawaharlal Nehru Centre for Advanced Scientific Research,
Jakkur Post, Jakkur, Bangalore 560 064, e-mail: tapas@jncasr.ac.in

Last date: The application should reach us **within 15 days** from the date of publication of this advertisement. Selection will be purely based on qualifications, experience and performance in the interview.