

No. R.12012/02/2023-HR/E-Office: 8225181
Indian Council of Medical Research
V. Ramalingaswami Bhawan,
P.O. Box No.4911 Ansari Nagar, New Delhi-110029

Dated:08/06/2023

ORDER

Subject: HRD Scheme of the Department of Health Research - "Short Term Fellow in Indian Institute" on "Elucidating of the role of mTOR pathway in regulating cell surface expression of Neuropilin1" under PI: Dr. Mushtaq Ahmad Beigh.

With the approval of the Competent Authority, sanction is accorded for funding of the training on "**Elucidating of the role of mTOR pathway in regulating cell surface expression of Neuropilin1**" in respect of **Dr. Mushtaq Ahmad Beigh, Asst. Prof., Department of Nanotechnology, University of Kashmir, Srinagar, Jammu & Kashmir** under **Short Term Fellowship training in Indian Institute - HRD Scheme of the Department of Health Research** on the terms and conditions detailed here under:-

2. AIMS & Objective of the proposed training:

Neuropilin 1 (NRP1) is a developmentally conserved cell surface receptor that functionally acts to bind several ligands like class 3 Semaphorins and several members of the VEGF family to engage in several signaling pathways that control cell migration and motility NRP1 is overexpressed in the majority of cancers and serves as a cellular metastatic marker. As part of the training, we would like to understand whether mTOR complex or mTOR kinase per se is involved in changing the overall expression of NRP1 or the surface display of the NRP1 receptor. To this end, we would like to use mTOR complex inhibitor Rapamycin or mTOR kinase inhibitor Torin in NRP1 expressing model breast cancer cells like MCF-7. Total NRP1 protein expression would be checked by quantitative western blot analysis. We would be employing laser confocal microscopy and flow cytometry to analyze the cell surface expression of NRP1 after treatment of cells with Rapamycin /Torin. Further MCF-7 cells after incubation with FITC-conjugated CendR peptide in the presence oabsence of rapamycin/Torin, confocal microscopy would be used to analyze CendR peptide internalization by monitoring the FITC signal inside the cells.

3. Name and Address of the mentor:-

Dr. Ramray Bhat, MBBS, PhD
Wellcome Trust-DBT India Alliance Fellow
Associate Professor, Molecular Reproduction, Development and Genetics
Associate Faculty, BioSystems Science and Engineering,
Indian Institute of Science,
Bangalore 560012 India .

4. The duration of training program is for 1 **Month** at **Molecular Reproduction, Development and Genetics, BioSystems Science and Engineering, Indian Institute of Science, Bangalore 560012.**

5. The budget for the training program is of **Rs.40,000/-**(Stipend of Rs.40,000) only.

6. The terms and conditions of fellowship are as follows:

- a. The period of stay in host Institute at **Molecular Reproduction, Development and Genetics, BioSystems Science and Engineering, Indian Institute of Science, Bangalore 560012** should not exceed beyond the period mentioned above excluding actual travel time for the fellowship.
- b. A Consolidated stipend of Rs.40,000/- per month will be paid for period fellowship in host Institute.
- c. The maximum ceiling of the contingent expenses including taxi charges to join & return from the host Institute, is Rs.20,000/- for entire period of fellowship. The expenditure will be reimbursed to fellow after production of the original vouchers.
- d. The payment of salary and other benefits such as leave, medical gratuity, GPF, pension as applicable to the Fellow will be dealt by his parent Institute as per rules and regulations. No liability on any of these accounts will be borne by the Department of Health Research.
- e. The Fellow will not be allowed to engage in any other gainful employment during the tenure of fellowship period.
- f. The Fellow should submit the copy of relieving letter from parent Institute and date of joining of the host Institute duly forwarded by the mentor to the DHR. Likewise the relieving report from the host Institute and joining report of the parent Institute, after completion of the training, should be submitted to the DHR.
- g. The Fellow should submit a detailed scientific report (in duplicate) in the prescribed format indicating the outcome and follow up actions of visit and the claim sheet etc. within 15 days on return to the DHR (copies of formats will be sent by email). This should be submitted within 2-4 weeks of his completion of the fellowship.
- h. Mentor will also submit a **Confidential Report** of performance in the prescribed format directly to the DHR.
- i. The Fellow will submit a detailed research proposal based on the concept proposal stated in the application to the DHR in prescribed format available at the DHR Web-site, within six months of the completion of the training/fellowship. Non- submission of project proposal shall be treated as non-completion of training/fellowship and it will be dealt with accordingly.
- j. In the event of cancellation/ revision of any sector of journey, after issue of the ticket, the penalty of cancellation charges/ difference of fare, if any, will be met by the Fellow.
- k. The Fellow is required to submit his contact address (work place and

residential along with telephone/ fax no.) to Programme manager (HRD scheme), immediately by post and e-mail at hrd-dhr@nic.in for future reference.

(Dr. V.P. Singh)
DDG(ICMR)& Scientist-E
Department of Health Research
Tel No.23736088

Copy to:

1. **Dr. Mushtaq Ahmad Beigh**, Asst. Prof., Department of Nanotechnology, University of Kashmir, Srinagar, Jammu & Kashmir.
2. Dr. Ramray Bhat, Wellcome Trust-DBT India Alliance Fellow, Molecular Reproduction, Development and Genetics, BioSystems Science and Engineering, Indian Institute of Science, Bangalore 560012.
3. The Secretary, DHR & DG, ICMR - For information please.