

REPORT

Report on participation of the ICMR International Fellow (ICMR-IF) in Training/Research abroad.

1. Name and designation of ICMR- IF : Dr Raunak and Scientist "D"
2. Address : INMAS, Brig. S.K.
Mazumdar Road, Delhi -
110054. India
3. Frontline area of research in which training/research was carried out : Design and synthesis of ^{18}F labelled $\text{A}\beta$ -peptide targeting ligand for enabling of uptake studies of ligand that reduce the neurotoxicity of the Alzheimer's disease related amyloid beta peptides.
4. Name & address of Professor and host institute : Professor Dr. Roger Stromberg & Karolinska Institute, Novum, Halsovagen 7 Huddinge 141 83, Sweden
5. Duration of fellowship : 6 month
6. Highlights of work conducted :
 - i) Technique/expertise acquired
Synthesis of novel amino acids, solid phase synthesis of new ligands targeting the $\text{A}\beta$ peptide, ^{18}F labelling of such ligands.
 - ii) Research results, including any papers,
Synthesis of building blocks, new amino acids, as well the precursor for ^{18}F -labelling was accomplished and incorporation of ^{18}F was successful. PET imaging in animal will follow and this will lead to 1-2 papers over the coming year. The ICMR will be acknowledge for the same.
 - iii) Proposed utilization of the experience in India:

This can lead to early diagnosis for people predisposed to developing Alzheimers disease (AD) due to overexpression of the A β peptide, but where not much plaque has been formed yet, and it can also contribute to assessing the uptake of potential drugs for treatment of AD. The scientific endeavor of our institute entails the use of new brain imaging technologies and fusion imaging to create new insights into the area of neurocognitive disorder. This training will be extremely useful to improve on competence level in the area of neurocognitive research.


Signature of ICMR-IF

ICMR Sanction No.

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