



KARUPPAIYA ANNAMALAI: Malaysia

Radiolabeled monoclonal antibodies for the diagnoses and treatment of cancer.



Mr. Karuppaiya Annamalai works as a researcher in the Medical Technology Division of the Malaysian Nuclear Agency in Kajang, Malaysia. He is currently undergoing a six-month International Atomic Energy Agency Fellowship at Weill Cornell Medical College's Department of Radiology in New York, New York. Shankar Vallabhajosula, a professor of radiochemistry and radiopharmacy at Cornell University, is his advisor and host during his stay in the U.S.

Mr. Annamalai's training covers the use of radiolabeled monoclonal antibody (mAb) for the diagnosis and treatment of cancer. He is learning techniques in conjugating mAb to DOTA and radiolabeled DOTA-mAb to different radioisotopes such as Indium-111, Yttrium-90 and Lutetium-177. The radiolabeled mAb will be further characterized for its

immunoreactivity, saturation binding, competition and internalization properties studies. The other aspect of the training will cover biodistribution studies as well as the use of gamma cameras to analyze the uptake of radiolabeled mAbs targets, specifically the tumors induced in nude mice.

With the skills and training obtained during his IAEA fellowship, Mr. Annamalai will be able to continue his research study to select suitable radiolabeled mAb with different radioisotopes that can be used for the diagnosis and treatment of cancer.

Trained 8/2/2010—2/1/2011