Dr. Tridib Bhowmick selected to receive 2011 CRS Outstanding Consumer and Diversified Products Paper Award

IBBR post-doctoral fellow Dr. Tridib Bhowmick selected to receive the 2011 CRS Outstanding Consumer and Diversified Products Paper Award.

This award is given annually to the best paper of the international conference of the Controlled Release Society, in the Consumer & Diversified Products track. The Controlled Release Society (CRS) is the premier society world-wide for drug delivery science and technology, serving members from more than 50 countries, including industry, academia, and government.

The topic of the paper contributed by Dr. Bhowmick and his co-authors focuses on the design and characterization of a drug delivery nanocarrier capable to provide efficient transport of therapeutics into the brain. Dr. Bhowmick, who works in the laboratory of Dr. Silvia Muro (IBBR and Fischell Department of Bioengineering) at the University of Maryland in College Park, is interested in exploring the use of polymer nanocarriers to develop non-invasive strategies for drug transport across the blood brain barrier (BBB) while minimizing safety concerns. Because the BBB is a highly regulated system, composed of a single layer of tightly bound brain cells, there is a physical barrier between the circulating blood and brain tissue. Dr. Bhowmick’s research shows that targeting model polymer nanocarriers to cell surface markers of the BBB involved in transport provides the means for directing therapeutic carriers across this barrier and into brain cells without apparent side-effects. The research demonstrated that nanocarriers successfully targeted delivery of active enzymes into the brain parenchyma and neurons. Therefore, this platform holds great potential for the development of therapeutic interventions for neurological conditions.

Dr. Bhowmick, who will be presenting this work at the conference, will receive a plaque and check at a plenary session during the 38th Annual Meeting & Exposition of the Controlled Release Society, to be held July 30 - August 3, 2011 in National Harbor, Maryland. The work described was funded by the American Heart Association (09BGIA2450014) and the National Institutes of Health (R01 HL098416) to Silvia Muro.