**Department of Biological Sciences, 5047 Gullen Mall**

**Detroit, Michigan 48202**

**(313) 577-5943 Office**

**(313) 577-3602 FAX**

**anantharam@wayne.edu**



June 21, 2013

Dear Editor,

We appreciate the invitation from Associate Editor Joan Hudak to submit a manuscript to the *Journal of Visualized Experiments*. We believe that the manuscript entitled “*Imaging plasma membrane deformations with pTIRFM*” will be of considerable interest to a broad community of scientists including cell biologists, biophysicists, and neurobiologists. Our submission describes the application of pTIRFM to the study of regulated exocytosis in bovine adrenal chromaffin cells. However, it is ideally suited for the study of other biological processes that involve changes in membrane shape, including endocytosis, cytokinesis, membrane budding, and cell motility. In this manuscript, we provide an overview of the technique, details on how it is implemented, along with a description of the image analysis procedures necessary to interpret membrane deformations detected with pTIRFM. The technique, as described here, was first reported in the *Journal of Cell Biology* in 2010. However, we continue to receive many requests from other labs for assistance in setting up the technique. Thus, we look forward to demonstrating how the technique is actually implemented on video. We think this format will be much more helpful to investigators interested in adopting the technique in their own labs.

All of the authors contributed substantially to the writing of the manuscript and are proficient in the techniques described. Suggested reviewers for the manuscript are:

Dr. Robert Chow, University of Southern California, rchow@med.usc.edu

Dr. Edwin R. Chapman, HHMI, University of Wisconsin-Madison, chapman@wisc.edu

Dr. Edward L. Stuenkel, University of Michigan-Ann Arbor, esterm@umich.edu

Dr. Corey Smith, Case Western Reserve University, corey.smith@case.edu

Dr. Manfred Lindau, Cornell University, ml95@cornell.edu

Dr. Wolfhard Almers, Vollum Institute (OHSU), almersw@ohsu.edu

We look forward to receiving your comments and the comments of the reviewers.

Sincerely,

Daniel R. Passmore, Andrew R. Peleman, and Arun Anantharam