


December 30, 2020

Dear Editor,

It is our pleasure to submit the manuscript “Applying cell migration and adhesion assays in *Leishmania*-host cell interaction” in JOVE. This manuscript was written by Yasmin S. Luz, Amanda A. D. Rebouças, Carla Polyana O. S. Bernardes, Thaíla S. da Silva, Claudia I. Brodskyn, Patricia S. T. Veras and Juliana P. B. de Menezes from Laboratory of Host-Parasite Interaction and Epidemiology at IGM/FIOCRUZ in Bahia, Brazil, and is being submitted for publication consideration.

In the present report, we attempt to describe a method to characterize dendritic cells' migratory aspects during *Leishmania* infection. This detailed protocol involves the differentiation and infection of dendritic cells, host cell motility and migration analysis, the formation of adhesion complexes, and actin dynamics analysis. This *in vitro* protocol will further elucidate the mechanisms involved in *Leishmania* dissemination within vertebrate host tissues and can also be modified and applied to other cell migration studies. We believe that a better understanding of the role host cells play in *Leishmania* dissemination within the host is essential for developing new therapeutic strategies and preventing severe forms of leishmaniasis.

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Sincerely,

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