

# Postdoctoral Opportunity in the Chandran & Ivanovic Labs



Chandran Lab

@ Albert Einstein College of Medicine

The Chandran Laboratory at Albert Einstein School of Medicine, NY ([www.chandranlab.org](http://www.chandranlab.org)) and the Ivanovic Laboratory at Brandeis University, MA ([www.tijanaivanovic.net](http://www.tijanaivanovic.net)) seek to co-host a postdoctoral researcher interested in gaining interdisciplinary experience in research on Ebola virus membrane fusion and its inhibition.

## **About us:**

The Chandran lab is at the forefront of research in basic biology and treatment of highly virulent emerging viruses, including Ebola virus. They identified the critical entry receptor NPC1 and uncovered its unusual mechanism of action (Carette, *Nature* 2011; Miller, *EMBO J* 2012); identified functionally constrained epitopes on the Ebola virus glycoprotein as targets for broad neutralization by antibodies (Wec, *Cell* 2017); and developed bispecific antibodies and human antibody cocktails conferring pan-ebolavirus protection (Wec, *Science* 2016, *Cell Host&Microbe* 2019).

Research in the Ivanovic lab has successfully combined single-virion real-time imaging and computational modeling with basic molecular virology and cell biology to reveal the molecular interplay of influenza virus fusion glycoproteins during membrane fusion *in vitro* and in cells (Ivanovic, *eLife*, 2013,2015). An unprecedented level of mechanistic detail uncovered from this unique combination of approaches has led to a prediction and enabled testing of general viral strategies for evasion of inhibitor effects (Li, *in prep.*).

## **About the position:**

Progress on the Ebola virus membrane fusion mechanism has been limited due to a lack of a robust *in-vitro* fusion assay. The candidate will take on the challenge to develop a single-virion membrane fusion assay for ebolavirus by drawing from the complementary expertise in the Ivanovic and Chandran labs. An ideal candidate will be flexible and willing to spend periods of time at either lab location (Boston and New York City) as required for a given phase of the project. The position will come with generous salary and project support.

## **Desired skills and experience:**

We are looking for independent and motivated individuals with strong skills in molecular biology, membrane biology, protein chemistry and/or surface chemistry. Background in either virology or advanced microscopy would be a further plus. The position will provide training in a needed set of additional techniques.

## **To apply:**

Qualified candidates should email Tijana Ivanovic (ivanovic AT brandeis DOT edu) and Kartik Chandran (kartik DOT chandran AT einstein DOT yu DOT edu) directly with a cover letter, CV, and contact information for three references.