



INDIAN INSTITUTE OF TECHNOLOGY BOMBAY

Technologies and Expertise available at IITB w.r.t COVID-19

Areas of expertise

Drug discovery / delivery / scale up

a. Prof. J.Bellare

- Nanoparticle based drug delivery and formulation (Prof. Bellare; jb@iitb.ac.in)
- Cryo-Electron microscopy to determine the structure of SARS-CoV-2 spike protein and its cellular receptor during infection. This could be helpful for design of new molecules or in decision on repurposing existing molecules.(Prof. Bellare; jb@iitb.ac.in)

b. Prof. K.V.Venkatesh

- Perform drug release studies and determine optimal drug dosage (Prof Venkatesh (venks@iitb.ac.in), Prof. Bellare jb@iitb.ac.in)
- Analyze and monitor clinical study through systems biology (Prof. Venkatesh; venks@iitb.ac.in)

c. Prof. Ravindra Gudi

- Assist in scale up through models and also data driven models (Prof. Venkatesh venks@iitb.ac.in, Prof. Gudi ravigudi@iitb.ac.in)

d. Pradeep Kumar P.I.

- Targeting non-canonical structures of COVID-19 genomic RNA by small-molecule ligands;
- developing functional nucleic acids like aptamers/siRNAs /antisense oligos against COVID-19 proteins