

47-2020-10896 | A Universal Imaging tool to Test the Efficacy of Anti-Corona Drugs  
[Sherman Eilon](#), HUJI, Faculty of Science, The Racah Institute of Physics

We propose an imaging tool that will test the efficacy of a wide range of potential COVID-19 drugs. The imaging tool will enable high-resolution imaging of the infection process of a large number of single cells, by single virus sub-units (virions).

The types of drugs that can be tested will include those with small molecules and antibodies, targeted both against the virus proteins and against the infected cells at every stage of infection and development of the virus (i.e. before infection, at the time of infection, and afterwards). The efficacy test will be carried out quantitatively and comparatively, with and without the drug.

The efficacy testing will be based on an innovative technology developed at the Hebrew University, in the laboratory of Professor Eilon Sherman, who specializes in optical microscopy in super resolution. Prof. Sherman's technology enables high resolution and controlled imaging of the interactions between cells, viruses and viral proteins.

To date, this technology has been demonstrated to work on numerous biological and clinical systems. The tool is expected to dramatically accelerate drug development and does not require involvement of human subjects or animal testing.

It has major advantages in terms of saving resources (money, equipment, etc.) as well as time required for the screening and development of antiviral drugs. Such advantages are critical for the rapid introduction of drugs into the market, as the cost of the development of any drug is valued at an average of 10 years and billions of dollars.

#### Patent Status

Contact for more information:



Keren-Or Amar  
VP, Business Development, Healthcare

**Yissum Research Development Company of the Hebrew University of Jerusalem**

Hi-Tech Park, Edmond J. Safra Campus, Givat-Ram, Jerusalem  
P.O. Box 39135, Jerusalem 91390 Israel  
Telephone: 972-2-658-6688, Fax: 972-2-658-6689