

Dear Einstein Community:

As I have remarked many times, I'm extremely proud of what we've accomplished at Einstein and Montefiore since the COVID-19 pandemic struck our community earlier this year. Everyone has worked hard, under very difficult circumstances, to carry on with our research, educate our students, and otherwise keep Einstein running in a smooth and efficient manner.

With that in mind, I want to congratulate a number of our principal investigators who have been awarded grants from my office to develop research focusing on COVID-19. The funding was made possible by a \$1 million challenge gift from long-time Einstein board member Michael F. Price and the Price Family Foundation, which was matched by other Einstein donors. As many of you know, Mr. Price has been a major supporter of Einstein and Montefiore for decades and made a significant donation to build the Michael F. Price Center for Genetic and Translational Medicine/Harold and Muriel Block Research Pavilion.

Thanks to this generous funding, four \$50,000 grants will support COVID-19 research conducted by the following faculty members:

- Evripidis Gavathiotis, Ph.D., and co-investigators aim to develop a small-molecule drug against the SARS-COV-2 main protease (an enzyme which breaks down proteins), termed Mpro or 3CL, which is responsible for viral replication and is an important drug target. *Co-Investigators:* Bogos Agianian, Ph.D., Adolfo Garcia-Sastre, Ph.D., and Kris White, Ph.D.
- **Betsy Herold, M.D.,** and co-investigator **Marla Keller, M.D.**, will test if there are quantitative and qualitative differences in the immune response to COVID-19 in children and adults that may contribute to different outcomes, and identify which aspects of the immune response are protective and those that drive disease progression.

- Jonathan Lai, Ph.D., and Kartik Chandran, Ph.D., will identify and characterize human monoclonal antibodies from recovered COVID-19 patients that target the viral surface spike protein and then use them as templates to design bispecific antibodies.
- Michael Lipton, M.D., Ph.D., and co-investigators aim to develop an artificial intelligence algorithm for portable chest X-rays to accurately stage severity, predict progression, and assess treatment response, recurrence, and survival, in order to inform risk management and resource allocation. *Co-Investigators:* Jeffrey Levsky, M.D., Ph.D., Parsa Mirhaji, M.D., Ph.D., and Tim Duong, Ph.D., (at Stony Brook University).

Three additional members of the Einstein community have received \$5,000 microgrants to support their COVID-19 work. They are:

- **Jerry Chao, M.D.**, to investigate Multi-System Inflammatory Syndrome in children.
- **Simone Sidoli, Ph.D.**, to develop and optimize rapid identification of COVID-19 infection via breath screening in mass spectrometry.
- Nicholas Sibinga, M.D., to examine the role of IRF5 variants in COVID-19associated cytokine storm with cardiovascular injury.

You can read more about these promising projects by visiting the <u>funded research</u> page of our <u>Einstein-Montefiore COVID-19 Research Collaboratories website</u>.

These projects represent only the beginning of research in this field, which we expect to expand in the months ahead. It is also a testament to how well our researchers work together—both on COVID-19 and in many other biomedical areas—to benefit both our Bronx community and the world at large.

I will have more to say on this and other subjects during my dean's chat later today at 1:30 p.m. and hope you will join me.

Sincerely,

Gordon F. Tomaselli, M.D.
The Marilyn and Stanley M. Katz Dean

Albert Einstein College of Medicine

Executive Vice President and Chief Academic Officer

Montefiore Medicine