

## **Collaborate with COVID-19 Biobank at Columbia University Irving Medical Center**

Columbia University Irving Medical Center (CUIMC)—in collaboration with our clinical partner, NewYork-Presbyterian Hospital (NYP)—has built a COVID-19 Biobank within the Columbia University Biobank (CUB). CUB at CUIMC is a centralized collection of biospecimens from all patients from CUIMC and currently contains samples from patients who were tested for COVID-19, including DNA, RNA, blood plasma, urine, and other tissue samples. CUB has collected samples from over 16,000 patients, a subset of which have been consented for genomics research and participation in future research studies. In addition to samples, rich clinical phenotype data and genomic data has and continues to be generated.

**Advantages of using CUB for COVID-19 research:** Given Columbia’s location in New York City, the early epicenter of the COVID-19 pandemic in the United States, CUB’S COVID-19 Biobank is arguably the largest and most distinct in the nation. CUB offers:

- An extensive collection of biospecimens (DNA, RNA, blood plasma, urine, NP swabs, and other tissue samples)
- A large pool of samples with consent for studies, including genetic analyses
- Substantial ethnic, racial, and demographic diversity of the patient population

### **How external entities can engage with CUB:**

1. **Apply to use CUB samples and data for commercial research.** CUB’s biospecimens are available to everyone, including corporate entities and industry affiliates. To the extent possible, we recommend that external partners explore collaborations with CU faculty to foster cooperative research environments. The biobank’s Sample and Data Access Committee will review all sample requests and accompanying project descriptions submitted by external entities and grant access, assuming the need for COVID-19 samples is justified and the quantity requested is available. Linked to data on patient outcomes through CUIMC’s electronic health record system, CUB’S COVID-19 Biobank is a powerful resource to support critically important research in basic science, genetics and genomics, epidemiology, public health, and more.
2. **Collaborate with Columbia researchers on their existing studies.** At the onset of the pandemic in New York, Columbia researchers immediately redirected their expertise to apply to COVID-19. There are many studies already underway at CUIMC using samples from CUB that could benefit from industry collaboration. For third parties interested in supporting Columbia research, CUIMC investigators are already engaged in the following research areas:
  - Developing new therapeutics, including potential vaccines and other therapies for COVID-19
  - The development and validation of new COVID-19 diagnostic technologies
  - Identification of biomarkers predictive of patient outcomes
  - Understanding how the COVID-19 virus is spread, with the goal of blocking its transmission
  - Understanding the role of SARS-CoV-2 in causing MIS-C multisystem inflammatory syndrome in children

**CUB’s leadership:** The Columbia University Biobank is led by an executive committee, including *Michael Shelanski*, MD, PhD, Senior Vice Dean for Research at CUIMC, Co-Director, Taub Institute for Research on Alzheimer’s Disease and the Aging Brain; *Muredach Reilly*, MBBCh, Director of CUIMC’s Irving Institute for Clinical and Translational Research and Associate Dean for Clinical and Translational Research, and Principal Investigator of CUB; *David Goldstein*, PhD, Director, Institute for Genomic Medicine; *Kevin A. Roth*, MD, PhD, Chair, Department of Pathology and Cell Biology; and *Mary D’Alton*, MD, Chair, Department of Obstetrics and Gynecology.

**Connect with CUB:** Third-parties interested in using COVID-19 samples from CUB can contact [DP2657@cumc.columbia.edu](mailto:DP2657@cumc.columbia.edu) and if interested in supporting Columbia COVID-19 research please reach out to [techventures@columbia.edu](mailto:techventures@columbia.edu) for more information.