

UNH Receives Federal Grant to Perform Surveillance for COVID-19 Variants

Wednesday, July 21, 2021

•
•
•



MEDIA RELATIONS

DURHAM, N.H.—Researchers at the University of New Hampshire will start genomic testing of positive cases of the COVID-19 virus to help monitor for any variants of concern that may be found in New Hampshire. UNH received a grant of \$757,000 from the National Institutes of Health to perform the testing in UNH’s state-of-the-art lab, specifically designed to handle COVID-19 testing, and the Hubbard Center for Genome Studies.

“When someone is tested for COVID-19, the goal is to look for a positive or negative result,” said Kelley Thomas, professor of molecular, cellular and biomedical sciences and director of the Hubbard Center for Genome Studies. “But as the COVID-19 virus continues to mutate over time it is becoming increasingly important, from a public health perspective, to know which variant of the virus a patient may have and its genetic makeup.”

In partnership with the N.H. Public Health Laboratories at the N.H. Department of Health and Human Services (DHHS), UNH scientists will genetically sequence roughly 12,000 stored human specimens previously confirmed by diagnostic tests to contain the virus, as well as any new positive cases that become available. Roughly half of the samples will come from UNH and half from the state. The objective of the project is to determine the genomic sequence of a large majority of the COVID-19 cases identified in infected individuals in the state and to apply that knowledge to better identify any variants of concern, like the recent Delta or UK variants. The information will help public health officials understand how the different variants spread, if they carry similar or different clinical symptoms and how they behave in those who may have already

had the virus or have been vaccinated. Large-scale genomic surveillance of the virus will also help provide data that will allow for cross referencing with other metadata like date of infection, location, severity of outbreaks and characteristics in different racial, ethnic, gender and age groups.

“This work will help us be prepared for any future mutations of the COVID-19 virus,” said Thomas. “It’s important to know when the variants evolve and how they infect different people but knowing the genetic makeup will help us prepare for any future variant outbreaks and give us vital information if we need to design a next generation of vaccines.”

According to researchers, there has been a limited number of COVID-19 genomes that have been sequenced in the United States. Those that have been sequenced have primarily been from patients who were already symptomatic and sick with the virus or special cases found through contact tracing. The researchers hope this project will provide much needed historic variant information.

The [University of New Hampshire](#) inspires innovation and transforms lives in our state, nation, and world. More than 16,000 students from all 50 states and 71 countries engage with an award-winning faculty in top-ranked programs in business, engineering, law, health and human services, liberal arts and the sciences across more than 200 programs of study. As one of the nation’s highest-performing research universities, UNH partners with NASA, NOAA, NSF and NIH, and receives more than \$110 million in competitive external funding every year to further explore and define the frontiers of land, sea and space.

- **Media Contact**

[Robbin Ray '82](#) | Communications and Public Affairs | robbin.ray@unh.edu | 603-862-4864

Latest News

- [UNH Research Center Releases 2021 Global Social Franchise Index](#)

November 12, 2021

- [Media Availability: UNH British Historian to Comment on Queen and Britain’s Remembrance Day](#)

November 10, 2021

- [MEDIA ADVISORY: UNH Celebrates Opening of New Health Sciences Simulation Center Nov. 8, 2021](#)

November 4, 2021

- [UNH-led Atlantic Marine Energy Center Receives Nearly \\$10 Million From DOE](#)

November 2, 2021

- [UNH Scientists Share \\$13M in Grants to Study Benefits of Feeding Dairy Cows Seaweeds](#)

October 28, 2021

[View All](#)



University of New Hampshire

UNH Today is produced for the UNH community and for friends of UNH.
The stories are written by the staff of [UNH Communications and Public Affairs](#).
Email us: unhtoday.editor@unh.edu.

[Manage Your Subscription](#) [Contact Us](#)

[Like us on Facebook](#)

[Follow us on Twitter](#)

[Follow us on YouTube](#)

[Follow us on Instagram](#)

[Find us on LinkedIn](#)

[UNH Today RSS feeds](#)

UNH Today • UNH Main Directory: 603-862-1234

Copyright © 2021 • TTY Users: 7-1-1 or 800-735-2964 (Relay NH)

[USNH Privacy Policies](#) • [USNH Terms of Use](#) • [ADA Acknowledgement](#)