



The Complutense University of Madrid finalizes the COVID-LOT Project, a saliva tracking system in the university community that, in its first phase, analyzes SARS-CoV-2 infectivity in up to 2000 samples daily

- In order to measure the reliability of the method, saliva samples and nasopharyngeal swabs have been taken from volunteers at the Infanta Sofía and Puerta de Hierro Hospitals and have been compared. Students at UCM Residence Halls have begun to be tested as well.
- Researchers José Manuel Bautista, professor of Biochemistry and Molecular Biology at the Faculty of Veterinary Medicine, Javier Arroyo Nombela, professor of Microbiology at the Faculty of Pharmacy and Director of the Genomics Unit at the Biological Research Support Center and Jesús Pérez Gil, professor of Biochemistry and Molecular Biology and dean of the Faculty of Biological Sciences, are the creators of the project.
- COVID-LOT has been funded entirely by resources from the Complutense University.

Madrid, December 16, 2020. - A team of researchers from the Complutense University of Madrid has finalized plans for the implementation of the COVID-LOT Project. The project consists of a saliva tracking system to detect signs of COVID-19 in the Complutense community.

COVID-LOT is an **interdisciplinary project** developed by three different, yet complementary, research profiles. Together, they work in service to the Complutense community and, by extension, to the society of Madrid by **analyzing potential infectivity due to COVID and periodic monitoring of different groups within the university community**. The basis will be PCR detection of the presence of the virus in batch-grouped saliva samples. In order to measure the reliability of the method, saliva samples and nasopharyngeal swabs taken from volunteers at the Infanta Sofía and Puerta de Hierro Hospitals have been compared. Students at UCM Residence Halls have begun to be tested as well. This has required mobilizing and reorganizing university

resources, including converting a Faculty of Biology classroom into a logistics sample room equipped with BL2 biosafety booths.

José Manuel Bautista, Professor of Biochemistry and Molecular Biology at the Faculty of Veterinary Medicine, Javier Arroyo Nombela, Professor of Microbiology at the Faculty of Pharmacy and Director of the Genomics Unit at the Biological Research Support Center and Jesús Pérez Gil, professor of Biochemistry and Molecular Biology and Dean of the Faculty of Biological Sciences, are the creators of the project. This is the same team that launched the Network of UCM Laboratories for COVID analysis in March 2020. In the words of the dean of Biology, the team "shows that, at the Complutense University, we are capable of solving unexpected, complex problems based on groundbreaking, multidisciplinary research." During the state of alarm period, the Network was dedicated to detecting the presence of the virus in samples taken in rest homes for the elderly within the Community of Madrid. Those samples were then taken to the high security laboratories of the VISAVET at the UCM Veterinary Faculty. Then, the purified RNA samples were distributed to a network of laboratories in different faculties within the university for RT-PCR analysis.

This new project aims to "help by making determinations through saliva." COVID-LOT is a prospective epidemiological analysis, not a personal diagnosis. "If there is no virus detection in a certain batch (combining 10 samples), it would no longer be necessary to continue with the analysis. However, if there is, the examination of individual samples would proceed in order to properly manage the shift to distance academic activities and the recommendation to receive assistance from the health system."

The Complutense Laboratory, where 2000 samples a day will be analyzed in the first phase, has developed and validated a procedure that requires the collaboration of University Hospitals Infanta Sofia and Puerta de Hierro. With the approval of the corresponding ethical committees, the hospitals supply saliva samples and nasopharyngeal swabs of infected patients and controls. This has confirmed good levels of correlation between the two methods. The project start-up has been financed entirely by the University's own resources from the Office of the Vice-Rector for Research.

The Complutense initiative seeks to do everything possible to keep the University open and provide society with needed services in a controlled manner.

All the material of this information (press kit) can be downloaded at:

<https://drive.google.com/drive/folders/1if4sXhEP8eDqFJslbo9IH3xavbs21Jn?usp=sharing>

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