



You are being invited to participate in a research study titled 'Algorithm Development for Detection of Positive COVID-19 Cases using Physical Activity and Resting Heart Rate '. This study is led by Dr. Kyle N. Winfree in the School of Informatics, Computing, and Cyber Systems at NAU.

The purpose of this research study is to **identify if and how measures of physical activity and heart rate can be used to detect who might be positive for COVID-19 in an on-campus living environment**. If you agree to take part in this study, you will be asked to share your Fitbit data with the NAU WearWare Fitbit data collection system, and to complete an online survey every two weeks. This survey/questionnaire will ask about potential COVID-19 symptoms and any factors that may influence heart rate and activity levels, and it will take you approximately 2 minutes to complete each time. In total, it is expected that participation in this study will take less than 30 minutes of your time. Your Fitbit data will be collected from July 1, 2020 to June 30, 2021, and will include data from six months before enrollment to the full duration after enrollment until the end of the study. Fitbit allows retrieval of data that is up to six months old. With the August semester start date, we are asking for this retroactive data, as well as current data to support analysis of Fall findings. Your retroactive data will automatically be collected if that data is available on the Fitbit servers. Your data may be used at both an aggregated and an individual level, though findings will be shared in a generalizable format, and will not be specific to your own assessments.

Your Fitbit device is not a medical diagnostic device. You will not be notified by the research team or by your Fitbit if your heart rate and physical activity are found to be indicative of COVID-19 or any other illness. This study aims to identify if such measures might be usable to detect such infections.

Participants should seek care from their health care provider for any COVID-19 or other flu-like symptoms they experience.

You will not see any direct benefit from participating in this research; however, we hope that your participation in the study may help us discover how to detect who may need to be tested and help prevent the spread of COVID-19 on the NAU campus. We believe there are no known risks associated with this research study; however, as with any online related activity the risk of a breach of confidentiality is always possible. To the best of our ability, your answers in this study will remain confidential. We will minimize any risks by keeping your data on a password protected online server that can only be accessed by the current researchers on this particular study.

Your participation in this study is completely voluntary and you can withdraw at any time. You are free to skip any question that you choose. If you choose not to participate, it will not affect your relationship with Northern Arizona University or result in any other penalty or loss of benefits to which you are otherwise entitled. Further, you may discontinue participation at any time without penalty or loss of benefits to which you are otherwise entitled. This will not affect your relationship with Northern Arizona University.

Findings from this study will be shared via peer-reviewed publication and in the Winfree Lab data repository in fully de-identified format only. Such publications will be announced on the Winfree Lab website, winfreelab.nau.edu. Following removal of personal identifiers and identifiable private information, data from this study may be used as part of future research students, or distributed to another investigator without additional informed consent from the participant or legally authorized representative.



If you have questions about this project or if you have a research-related problem, you may contact the researcher, Dr. Kyle N. Winfree at (928) 523-7165 or by email at kyle.winfree@nau.edu. If you have any questions concerning your rights as a research subject, you may contact Northern Arizona University IRB Office at irb@nau.edu or (928) 523-9551.

By completing all or part of this survey, and by submitting this survey, I affirm that I am at least 18 years of age and agree that my information may be used in the research project described above. Please print or save a copy of this form for your records.