



Participant Information Sheet for the Safe Blues 2021 Experiment



This is the official Participant Information Sheet (PIS) for the Safe Blues 2021 experiment at The University of Auckland City Campus. The PIS is dated March 19, 2021 and will remain fixed.

Additional informal information is available in the [answers to FAQs section](#).

Project title: The Safe Blues Experiment: A Method for Estimation and control of Epidemic Spread.

Name of Principal Investigator/Supervisor (PI): [Dr Azam Asanjarani \(The University of Auckland\)](#), [Dr Keng Chew \(The University of Queensland\)](#), [Raj Dandekar \(Massachusetts Institute of Technology\)](#), [Prof Shane G. Henderson \(Cornell University\)](#), [Dr Marijn Jansen \(Delft University of Technology\)](#), [Joshua McDonald \(The University of Queensland\)](#), [Dr Sarat Moka \(The University of Queensland\)](#), [Associate Prof Yoni Nazarathy \(The University of Queensland\)](#), [Dr Christopher Rackauckas \(Massachusetts Institute of Technology\)](#), [Dr Kirsty Short \(The University of Queensland\)](#), [Prof Peter G. Taylor \(The University of Melbourne\)](#), [Aapeli Vuorinen \(Columbia University\)](#), [Associate Prof Ilze Ziedins \(The University of Auckland\)](#).

Head of organizing academic unit: Prof. James Curran. j.curran@auckland.ac.nz. Head of the Department of Statistics, The University of Auckland.

Researcher introduction

Welcome to the Safe Blues experiment. The experiment is coordinated by [Dr Azam Asanjarani](#) from the Department of Statistics at the Faculty of Science at the University of Auckland. It involves many other researchers as mentioned above.

Project description and invitation

This experiment aims to improve scientific understanding of how social mobility and epidemic spread interact and how evolving technologies for assessing epidemic spread can be improved. In a nutshell, the experiment involves transmitting virtual and safe 'virus-like' tokens by Bluetooth between phones, mimicking the properties of real virus transmission. More information is [here](https://safeblues.org/overview/) (at <https://safeblues.org/overview/>).

The experiment is open to any participant over 16 years of age who is willing and able to run the Safe Blues app on their personal Android phone. When the app is run, it exchanges Bluetooth communication with neighboring phones running the same app. It also uses Android's location services to check if the participant is within the area of the University of Auckland City Campus. The app does not cause any damage to the phone, does not use any personal data (images/files/contacts etc.) from the phone, and is in general a well-intended and well-programmed app, with open source code on GitHub available via the [Safe Blues website](#). Nevertheless, the app, like any other mobile app, consumes phone battery. It is the responsibility of the participant to manage their phone battery usage.

Participants are by default invited to take part in prize draws as described in detail on the [prizes page](#) (at <https://safeblues.org/prizes/>). Winners will be asked if they wish to have their picture and short bio posted on the Safe Blues website.

Project procedures

Participants are to download the Safe Blues app as described in the [Join page](https://safeblues.org/join/) (at <https://safeblues.org/join/>). Then when going about their day to day business at the University of Auckland City Campus, participants are requested to run the Safe Blues app in the background of their Android phone while enabling Bluetooth and location services. No further engagement is required, however participants may monitor their collected hours for purposes of the prize draws. Participants may choose to not run the app at any time.

Data storage/retention/destruction/future use

The experiment is managed through two distinct databases. A Participant Management Database (PMS), hosted at The University of Auckland, is used to store the e-mail addresses and consent agreements of participants, as well as a record of the campus hours of each participant. The PMS and its data are used only for purposes of managing the prize draws and the list of participants. Data from the PMS is not analyzed or publicised in any way, with the exception of analysis of aggregated participation counts over time. The second database, called the Anonymous Data Server (ADS) is managed in the cloud and only contains aggregate anonymized data. This data is a time-stamped record of the number of phones with each set of strands. As this database follows the Safe Blues protocol, phone (app) identities are not revealed during communication, and phones (apps) only have temporary ids that are replaced on a daily basis. At a specific point in time, experimental data can perhaps be used to de-identify phones and identities, however since this data is only analyzed retrospectively (after the experiment is finished) it is considered to be fully anonymized. Note that the aggregate Safe Blues data from the ADS will be made publicly available after the experiment concludes.

Right to Withdraw from Participation

The experiment is run from May 1, 2021 until Nov 3, 2021. Participants may join or leave the experiment at any time during this time window. After Nov 4, 2021, participants will be advised to remove their Safe Blues app.

By agreeing to take part in the experiment, a participant agrees to share the Safe Blues data of their Safe Blues app in an anonymized aggregated manner as described above and in accordance with the Safe Blues protocol. A participant may choose to withdraw from the experiment at any time and this will result in deletion of their personal information from the PMS. However, their aggregated anonymized data already recorded on the ADS will remain in the database and will potentially contribute to the scientific findings of the experiment. The access to the consent form of a participant is restricted to the researchers of this project.

Anonymity and Confidentiality and Further Details

A record will be kept of participants in the experiment via the list of those who have consented to participate in the trial (identified via e-mail addresses). For those participants who wish to be eligible for the prize draw, the number of hours on campus with the app turned on will also be recorded. Otherwise, this information is not recorded. This individual information, both the consent, and the campus hours for each participant, will remain confidential to the researchers on the Auckland campus. The empirical distribution of campus hours over the whole cohort may be made available to participants and other researchers. The viral strands data, collected from participating phones, is associated with a temporary id that changes every day, and cannot be linked back to the individual carrying the phone, thus it is fully anonymous. In addition, the viral strands data will only be published or otherwise made public in aggregated form, no individual phone will be identified in any publication.

The Safe Blues research team and their respective universities and research institutions are not responsible for any damage caused to participants' phones, health, or wellbeing due to the experiment. The experiment simply asks participants to run the Safe Blues app at their own discretion while present at or near the University of Auckland City Campus. It is ultimately the responsibility of the participant to make wise choices regarding mobility and cellular phone usage.

If a participant is a student at The University of Auckland, we give our assurance that participation or non-participation in this study will have no effect on the student's grades or relationship with the university. The student may contact their academic head should they feel that this assurance has not been met.

It is the responsibility of the Safe Blues research team to conduct the prize draws in accordance with the specified rules from the [prizes page](#) in a fair, just, and transparent manner. However, minor deviations from these rules due to unforeseen circumstances will be tolerated as long as agreed by the Safe Blues team. Further, winners of prizes will in no way hold members of the Safe Blues research team, or their institutions, liable to any damage or unforeseen mishap with the prizes.

Contact Details

Participants may contact [Dr Azam Asanjarani](#) via the Safe Blues contact e-mail contact@safeblues.org.

UAHPEC Chair contact details

For any queries regarding ethical concerns you may contact the Chair, The University of Auckland Human Participants Ethics Committee, Office of Research Strategy and Integrity, The University of Auckland, Private Bag 92019, Auckland 1142. Telephone 09 373-7599 ext. 83711. Email: humanethics@auckland.ac.nz.

Approved by the University of Auckland Human Participants Ethics Committee on 22/03/2021. for three years. Reference Number UAHPEC22143.

You can also download a copy of this Participant Information Sheet [here](#).

A consent form is [here](#).

[Join](#)[Main Experiment Page](#)