



# SPECCHIO

A GENEVA E-PLATFORM

FOR DYNAMIC MONITORING OF POPULATION HEALTH

Baysson H<sup>1</sup>, Collombet P<sup>1</sup>, Joost S<sup>2</sup>, Attar Cohen H<sup>3</sup>, Guessous I<sup>1</sup>, Stringhini S<sup>1</sup>

- <sup>1</sup>Faculté de Médecine, Université de Genève
- <sup>2</sup>Laboratoire des Systèmes d'Information Géographique, Ecole Polytechnique Fédérale de Lausanne, EPFL
- <sup>3</sup>Direction de la Santé, Département de la sécurité, de l'emploi et de la santé (DSES),
- Secteur de prévention et promotion de la santé, République et Canton de Genève



# CONTEXT

- ▶ The Cantonal Concept of Prevention and Promotion of Health 2030 identifies 8 strategic axes for prevention and promotion of health in the canton of Geneva



- ▶ In order to provide efficient public health decisions making, it is crucial to obtain reliable and recent data on the state of health of the population.
- ▶ In this context, a web-platform for the dynamic monitoring of the health status and well-being of the population is being developed in the Geneva canton. Carried out in collaboration with the Directorate General of Health Geneva, Specchio is a new project aimed at setting up a digital longitudinal health study in Geneva.

# METHODS

- ▶ Recruitment will be carried out over 5 years so as to enroll up to 20 000 volunteers, resident in Geneva and aged  $\geq 18$  years, followed-up for at least 10 years.
- ▶ Once connected to the dedicated web-platform, participants will fill a general self-administered questionnaire on their socio-demographic and lifestyle characteristics, anthropometry, health status, physical activity and diet.
- ▶ Environmental, behavioral and occupational exposures will also be evaluated *via* more on line specific questionnaires.
- ▶ Current addresses of residence will be geocoded and linked to geographical databases to passively gather information on noise, air pollution, green areas, and other exposures.
- ▶ Surveillance of health events will be implemented via yearly self-administered on line questionnaires and potentially via passive linkage to medical databases (medical file) and health registries with the participants' consent. For a subsample of volunteers, biochemical samples and biomarkers will be collected...

# RESULTS

- ▶ Depending on long-term funding by the Directorate General of Health Geneva, recruitment will be carried out over 5 years (2021-2024) as to enroll up to 20 000 volunteers.
- ▶ Different communication strategies used for recruitment and long-term participation need to be implemented taking into account trust from participants, different levels of health literacy and need of justice.
- ▶ Particular attention will be paid to the inclusion of socially vulnerable populations, generally under-represented, upon active collaboration of associations
- ▶ In the context of the COVID-19 pandemic, it was decided to take advantage of an online digital platform Specchio and to build up Specchio-COVID19 in order to respond to the current health emergency and to support public health actors in their decision making.

**SPECCHI**  - **COVID19**  
Suivi de la pandémie pour les genevois

# SPECCHIO-COVID19

SPECCHIO - COVID19  
Suivi de la pandémie pour les genevois

- ▶ All participants (aged 18+) of serosurveys conducted in Geneva (Stringhini, Lancet 2020) are invited to be included in Specchio-COVID19 (<https://www.specchio-covid19.ch>) . Recruitment was among participants of a previous population-based study (Bus Santé), among non confined essential workers and among socially and clinically vulnerable populations.
- ▶ The digital follow-up is carried out via online questionnaires. It consists of weekly, brief status updates with respect to self-reported symptoms and risk exposures as well as monthly more detailed follow-up including questions about mental health, well being and risk perception.
- ▶ Seroconversion of participants will be monitored, and the level and duration of protection of specific antibodies in IgG-positive participants will be assessed via clinical visits.
- ▶ Specchio-COVID19 collaborates with the national project Corona Immunitas (<https://www.corona-immunitas.ch/>), a research program consisting of longitudinal seroprevalence and seroepidemiological studies held across several regions and populations in Switzerland.

**THANK YOU FOR YOUR ATTENTION**