# VUB Quality Criteria for Citizen Science

## Design of a citizen science research project

- The research (project) is centered on a **clearly defined scientific research question**.
- The researcher or project coordinator can demonstrate that the **citizen science methodology** fits the defined scientific research question.
- The intent, goals and results/outcomes are clear, and are being **communicated** in an **accessible** and **understandable** way.
- The research (project) cannot have only educational or societal goals. Having a **scientific goal** is a **must**.
- The objectives of the research (project) are impossible - or very difficult - to achieve without the **contribution of citizens**.

## Participation and engagement

- The project involves citizens in **one or more phases** of the **scientific research process** (formulating the research question(s), method design, data collection, data analysis and the publication/communication of results).
- The research (project) **actively involves** citizens in the **scientific research process**. Involving citizens just to question them or to collect data on them is not citizen science.

## Values

- The research (project) is in line with the **values of the VUB**. **Collaboration** and **multi-disciplinarity** are a starting point.
- The topic and objective of the research (project) have **societal relevance**, with a clear connection to citizens, organizations, or networks in (mainly) Brussels, or, by extension, other cities.
- A **democratic attitude** adds value for **all participants**, both citizen scientists and professional scientists.
- Citizen scientists get **feedback** from and about the project.
- Citizen receive **recognition** in the project results and publications.
| Ethics | • The researcher or project coordinator considers **ethical aspects** during the design and duration of the research (project) (e.g. diversity, inclusion, gender equality, reflection on inclusion or exclusion of specific groups).
  
  • The researcher or project coordinator has **evaluated** and mitigated all **risks** related to participation.
  
  • It is clearly communicated what **data** (personal and research data) will be collected within the project or study, and participants must **consent** to this information via informed consent, prior to participation. |
| Data Management | • The project has a **data management plan (DMP)** that complies with European data protection regulations. |
| Open Science | • The **data and metadata** of the project or research will be made public, provided there are no legal or ethical arguments against doing so.
  
  • The **results** of the project will be published in an **open-access format**, provided there are no legal or ethical arguments against doing so. |
| Protocol | • The objectives of the research (project) can be achieved with a **clear and simple protocol**.
  
  • The assignment of **tasks and roles** in the project (from the project leader to citizen scientists) is clear and transparent.
  
  • The **technology** needed to perform the tasks is readily available for citizens, or is being provided by the researchers or project coordinators.
  
  • The objectives of the research (project) (amount of data needed, coverage, required number of participants) are **reasonable** and **achievable** within a given time frame.
  
  • The protocol ensures that the data collected by citizens are of **sufficient quality** to answer the research question (and to generate a scientific publication) and/or to derive indicators for policy. |

In case of any questions or remarks, do not hesitate to reach out at [citizenscience@vub.be](mailto:citizenscience@vub.be).