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| **1. Project Details** |
| * 1. **Project title: Investigating Symbiont-Based Immunity in *Anopheles* Mosquitoes**   **against *Plasmodium falciparum* Infection**  **1.2 Names and email of the principal investigator (PI): Jeremy Herren**  **1.3 Project start date:**1st Aug 2023  **1.4 Project end date:** 30th April 2025  **1.5 Name and email of collaborators:** Jacqueline Wahura  Daniel Masiga  Nicky Mulder  Thomas Onchuru  Joseph Gichuhi  Godfrey Nattoh  Edward Makhulu  Lilian Mbaisi |
| **2. Responsibilities** |
| Please provide the names and emails of those responsible for:   1. Data metadata creation   Jacqueline Wahura: jwahura@icipe.org   1. Data collection and quality assurance   Jacqueline Wahura: jwahura@icipe.org |
| **3. Data management** |
| **3.1 List types and formats of data**  Statistical qPCR data  Genomic data  Microscopic images  **3.2 The DMMG unit has digital data collection tools (**[**ODK**](https://odk-server.icipe.org/)**,** [**KOBO**](https://kf.dmmg-apps.icipe.org/)**, and** [**REDCap**](https://kf.dmmg-apps.icipe.org/)**). Do you intend to use either of these tools for data collection? If yes, state how otherwise give reasons.**  Yes, I Intend to use Redcap, which is the recommended tool for the overall SymbioVector Project that I will be working in. Mainly, all data sheets from qPCR and microscopic images will be uploaded to Redcap for archival and analysis.  **3.3 The DMMG unit has mobile phones that you can use for data collection. Do you intend to use these phones and how many?**  No, my data will mainly be retrieved from qPCR and sequencing machines.  **3.4 Explain the intended data collection methodologies**  Logs from qPCR runs, microscopy and sequencers will be the main instruments for obtaining data  **3.5 From which region(s) do you intend to collect data**  Mosquitoes used in this work will be collected mainly from Ahero and Mwea in Kenya  **3.6 How will you intend to maintain data quality and standards**  During the project, steps will be taken to ensure that the data generated adheres to the FAIR principle (Findable, Accessible, Interoperable, and Reusable). These include inclusion of appropriate controls, recording of all specimen-associated metadata and use of replicates and run repeats to ensure reproducibility.  **3.7 Do you intend to use the** [**common ontology**](http://dmmg-co.icipe.org/) **(managed by DMMG) to standardize meta-data? If yes, state how otherwise give reasons**  Yes, where the DMMG has ontology for my specimens/data terms, I am willing to adopt those or assist in creation of standard terms for new items  **3.8 Before you publish your scientific finding, do you intend to store that data at the institution’s** [**data warehouse**](https://dmmg.icipe.org/dataportal/) **(managed by DMMG) for at least 10 years? If yes, state how otherwise give reasons**  Yes, the DMMG unit will provide archival services for my data as per the agreed data management plan with the SymbioVector project  **3.9 Before you publish your scientific finding, do you intend to store all scripts involved in processing that data at the institution’s** [**GitHub account**](https://github.com/icipe-official) **(managed by DMMG) for at least 10 years? If yes, state how otherwise give reasons**  Yes, I will provide active links and/or script files used for my data processing to the DMMG unit  **3.10 When the data is closed and you have finished your scientific activities, do intend to preserve your data at the institution’s** [**data warehouse**](https://dmmg.icipe.org/dataportal/) **(managed by DMMG) for at least 10 years? If yes, state how otherwise give reasons**  Yes, I prefer to have the data accessible on the data warehouse for accessibility and utility to others |
| **4. Data security** |
| **4.1 What are the main risks to this data (i.e., data security)**  There are minimal risks to this kind of data, especially since majority are machine generated output. However, data loss is still a pertinent issue due to possibilities of loss of physical storage devices, or attacks by malware  **4.2 How do you intend to mitigate data security risks**  Uploading the data to the institution’s data warehouse and use of backup devices can mitigate this kind of risk |