

FACILITIES AND OTHER RESOURCES

CORE FACILITIES AT THE CAUCASECO SCIENTIFIC RESEARCH CONSORTIUM

A consortium for biomedical research was established in Cali, Colombia in 2000 with the mission of promoting innovative, interdisciplinary initiatives that could bridge the gap between science and environmental policy. Altogether the consortium has contributed to the scientific development mainly of Colombia, but also in other countries of the Latin American region, through scientific and academic activities with great emphasis on immunology of infectious diseases and vaccine development, for human malaria.

In this period, Caucaseco SRC has established a unique comprehensive research facility integrating several research centers in a 11 acres campus located at Km. 6 on the road communicating Cali (Valle del Cauca, Department) with Puerto Tejada (Cauca, Department) in the Southwest of Colombia. In an area of Redacted by agreement of laboratories, animal facilities, office space, seminar and storage rooms, and other facilities, Caucaseco hosts the Malaria Vaccine and Drug Development Center (MVDC/CIV), the Primate Center Foundation (FUCEP), Applied Biotechnology Center (CBA), and Colombian Pacific Health Institute (INSALPA) all of them with highly complementary capacities for malaria research. Its location near the Pacific Coast, one of Colombia's most malaria- endemic areas, provides Caucaseco SRC with permanent and readily access to unique reagents and conditions for malaria research, such as parasite, sera, blood cells and mosquitoes.

The consortium has significant records of research funded by the Colombian Research Council (COLCIENCIAS) and by international funding agencies such as US NIH, the European Union (EU), IAEA and the WHO. Continuous research activities and permanent external funding has allowed the establishment at Caucaseco SRC of a solid administrative structure that ensures stable management and administrative coordination. More importantly, Caucaseco SRC has maintained permanent funding from NIH since 2000, period during which, an Tropical Medicine Research Center (TMRC) (2000-2007), an International Center of Excellence for Malaria Research (ICEMR) (2010-2018), a Fogarty International Research Training Program (IRTP) and several R01 programs have been granted.

Modern facilities with high-tech equipment have allowed very comprehensive malaria research projects in the same campus and a total of >150 peer reviewed publications in leader specialized journals witness the dynamic scientific work during the last 18 years.

For more than 30 years the Pacific Health Institute (INSALPA) has established a very solid and stable interaction and collaboration with endemic communities of Colombia and more recently in the context of the Latin American ICEMR with endemic communities of several other countries including Peru, Ecuador, Panama and Guatemala. Moreover, this has allowed a close interaction with the Ministries of Health of Colombia and these neighbor countries which facilitates interaction with endemic communities, and allows the translation of research into health policies. These interaction with communities and governments are valuable for the success of this proposal. Malaria vaccines, particularly against *P. vivax* would be of utmost importance in these regions with low transmission intensity where malaria elimination is more likely.

Data Management (DM) and Biostatistics Core: A solid DM and biostatistics core was created in 2000 in the frame of a NIAID-TMRC program and then strengthened in the context of the Latin American ICEMR. This unit allows interaction of the different research units and groups so that knowledge from different research projects can be shared. It will also support educational activities and training of project participants, including the ethics of research. DM plan is composed of the following: 1) Standards, aimed to protect subject confidentiality and stored data; 2) Data and Process flowcharts, to identify actors, inputs and data storage among others; 3) Quality assurance to verify data integrity, accuracy of data processing and data dissemination; 4) Deliverables and indicators, detailing the deliverable plan, and 5) Project Management and Risks. It has been implemented the RED-Cap system (Research Data Capture) developed by Vanderbilt University. REDCap is a secure web application for building and managing online surveys and databases, and is currently being used by several research centers around the world.