



MGVP, INC.

REQUEST FOR PROPOSALS

March 13, 2017

ENHANCEMENT OF FIELD AND LABORATORY ELECTRONIC DATA CAPTURE, ARCHIVING AND PROCESSING TO SUPPORT THE CONSERVATION OF EASTERN GORILLAS

1. Project Background and Description

- I. MGVP, Inc. (“MGVP”) is a not-for-profit Maryland Corporation doing business as Gorilla Doctors. Gorilla Doctors provides on-site veterinary monitoring and clinical interventions to wild endangered mountain gorillas in Rwanda, Uganda and the Democratic Republic of the Congo (DRC). The Gorilla Doctors mission is to conserve eastern gorillas with life-saving veterinary care and science using a One Health approach. It is recognized by its host country governments, collaborating non-profit organizations, and local communities as effective and efficient. In addition to its veterinary activities, Gorilla Doctors engages in scientific research and surveillance, trains wildlife veterinarians for park and environmental agencies in its host countries, and provides preventive health care for park personnel.
- II. Improvement in data collection, analysis and reporting is necessary to fulfill the Gorilla Doctors mission. The goal of this project is to make such improvement in Gorilla Doctors’ current gorilla health daily observation information management system, a program called Internet Management Program to Assist Conservation Technologies (“IMPACT”).
- III. Funding for this project is coming from a portion of a grant to MGVP, Inc. from the U.S. Department of State through the U.S. Embassy in Kigali, Rwanda. The project is subject to the terms of the specific grant as well as Department of State Standard Terms and Conditions for Federal Assistance Awards.

- IV. Implementation should begin as soon as practicable after signing of a contract and should be complete by July 31, 2017.
- V. Contact with MGVP, Inc. is

Michael Cranfield, DVM
MGVP, Inc.
PO Box 356
Davis, CA 95617
mrcranfield@gorilladoctors.org

With a copy to

Michael Halaiko
MGVP, Inc. Vice-President
c/o Miles & Stockbridge
10 Light Street
Baltimore, MD 21202-1487
mhalaiko@MilesStockbridge.com

VI. Response to this solicitation should include:

1. Capabilities: Describe the following
 - a. Experience and capability of your firm and staff to perform the work described below;
 - b. The specific staff who would be assigned and their experience with similar projects
 - c. The estimated time for completion of the project and estimated hours to be provided by each individual in your team;
 - d. The financial stability of your firm and its ability to continue to provide services over the coming 60 months;
 - e. Your protocols for data security, disaster recovery and service reliability.
2. References: Furnish the organization name and contact name and title with telephone number for this purpose. Provision of this information constitutes your release to make the contact.
3. Work and Cost: Furnish a timeline and detail of time and expense for each deliverable (See Section 3 – Project Scope and Requirements). Preference will be given to a low-cost contract for the required deliverable; we seek total costs not to exceed \$125,000.
4. Disclosures: Please provide a written statement disclosing any relationships with persons or entities that may create a conflict of interest or the appearance of a conflict of interest; disclose any present or past material financial interest in your company by any employee or board member of MGVP, Inc., any prior business dealings with any employee or board member of MGVP, Inc., the

Rwanda Development Board, Uganda Wildlife Authority, Institut Congolaise pour la Conservation de la Nature or the University of California at Davis. In addition, please provide information (title, term, total \$ and purpose) on any contract or subcontract which you may have received from the U. S. Federal government in the past five years, whether or not these contracts or subcontracts are on-going, and specific details of any pending legal proceedings (criminal or civil), or regulatory or disciplinary actions by any state or federal regulatory agency, involving your firm or members of the firm; or any convictions, judgements or settlements resulting from such proceedings or actions within the past five years.

- VI. Proposals should be in writing with a description of the scope of work, delivery timeline and project costs for products and services (broken down by project components), and must be received both electronically and in writing by 12:00 noon Pacific Daylight Time on April 1, 2017. Questions regarding the scope or any details of the project should be directed to Mike Cranfield (contact information above).
- VII. MGVP, Inc. will review proposals and contact prospective vendors for necessary clarification regarding their proposals as soon as practicable following submission with the intent to select a vendor quickly, but reserves the right to change, extend or cancel the process. Selection will be made solely on the judgement of MGVP, Inc. based on factors which it considers material regarding its current and future needs in regard to these matters and not solely on the cost in a proposal.

2. Background

- I. *Twenty-five years of Service* – Gorilla Doctors began as the Volcanoes Veterinary Center, built by the *Morris Animal Foundation* (MAF) in 1986 at the request of the late primatologist Dr. Dian Fossey, who was deeply concerned about the number of mountain gorillas being injured and killed by snares set by hunters within the park. At the time, only 248 gorillas remained in the wild. Despite Fossey's untimely death, the MAF established and maintained the clinic, which grew to become a full-fledged program called the Mountain Gorilla Veterinary Project. In 1998, our current Co-Director Dr. Mike Cranfield was hired by MAF to direct the program. Under his leadership, the program grew beyond serving simply as a "first-aid" program for mountain gorillas, to becoming one that embraces all health-related challenges for mountain gorillas, aiming to prevent illness and injury through improvements in the health of the other animals and the people that come into contact with gorillas. In 2005, the MGVP became MGVP, Inc., a non-profit organization independent from MAF. In 2009, Cranfield and Dr. Kirsten Gilardi established a strategic partnership between MGVP, Inc. and UC Davis' Karen C. Drayer Wildlife Health Center, called Gorilla Doctors, headquartered at UC Davis. Each organization brings institutional and financial resources to bear upon the shared mission of the organization.

- II. *Our One Health Approach* – Gorilla Doctors is an international team of veterinarians working in Rwanda, Uganda and the Democratic Republic of the Congo; it is the only provider of *in situ* veterinary care for wild human-habituated mountain gorillas (*Gorilla beringei beringei*) and Grauer's gorillas (*G. b. graueri*) suffering life-threatening injuries and illnesses as a result of close contact between gorillas and people. It improves the sustainability of gorillas using an integrated "One Health" approach that combines health care, research, capacity building, information sharing, and strategic partnerships. One of the keys to Gorilla Doctors' success today is that it applies a holistic approach to gorilla health: it does not just function as an emergency "first-aid" program, but rather as one that recognizes that an ounce of prevention is worth a pound of cure. To that end, Gorilla Doctors not only provides veterinary care for gorillas, but also delivers preventive health programs for the several hundred individuals who work inside the parks protecting gorillas, and to their families. As well, Gorilla Doctors conducts health-related research and disease surveillance, and works closely with local universities to help train the next generation of wildlife veterinarians.

III. *The Human Context for our Work* – A thriving mountain gorilla population impacts more than the individual gorillas: it benefits the local community, other wildlife, and the ecosystems they share. Mountain gorillas survive in protected areas surrounded by the densest human populations in all of continental Africa (300-500 people/km). These communities are comprised largely of subsistence farmers who survive on an income of little more than \$1/day. Most communities have suffered tremendously in the civil wars that have occurred in the region, either as victims of genocide and military attacks, or as the result of massive influx of cross-border refugees fleeing violence. Mountain gorilla tourism is an extremely important source of income for the region. In fact, it is the #1 source of foreign revenue in Rwanda: more than 20,000 people from around the world come to view wild gorillas every year, bringing much-needed cash to a country still recovering from the 1994 genocide. Mountain gorilla tourism funds the management of the parks for all three host countries, which in turn creates jobs in and around the parks.

IV. *Conservation Challenges* – Despite the ecological and economic importance of the mountain gorilla, its survival as a species remains threatened by war, poaching, and disease. Mountain gorillas live in a region that has experienced tremendous civil upheaval and violence for decades. Rebel soldiers have recently occupied parts of Virunga National Park in eastern DRC that overlap with mountain gorilla home ranges. Illegal charcoal production inside parks remains a constant challenge for park authorities, and poaching occurs inside the parks in all three countries, with many mountain gorillas becoming unintended victims of snares set for other wildlife. And unfortunately, gorilla poaching appears to be on the rise once again, especially in eastern DRC. In addition, mountain gorillas face very real disease threats. Almost 60% of the world's mountain gorillas are habituated to human presence to facilitate behavioral research and tourism. Mountain gorilla tourism brings thousands of people from around the world and from local communities into close contact with human-habituated mountain gorillas every day, every year. Because mountain gorillas share 98.5% of their genome with humans, human-borne infectious disease remains an ever present threat; in fact, Gorilla Doctors recently proved that mountain gorillas are susceptible – and succumb -to human pathogens.

- V. *Our Veterinary Team in Africa* – The core mission of Gorilla Doctors is to deliver veterinary care to ill and injured mountain gorillas for which a prognosis for full recovery without intervention would be grave. The Gorilla Doctors' work benefits the entire population, because each treated animal contributes to the health and genetic diversity of the population. Gorilla Doctors employs twelve full time veterinarians stationed in the three range countries of the mountain gorilla to monitor gorilla health daily, and to provide clinical care *in situ*. The Gorilla Doctors' approach has had significant impact on the survival of the species: scientific research has determined that human-habituated mountain gorillas, which receive veterinary care from Gorilla Doctors, have increased by 4.1% annually, while non-habituated mountain gorillas, which Gorilla Doctors is unable to treat, have decreased by 0.7% annually. The five-fold difference between the growth rates of the two subpopulations was attributable to the fact that habituated gorillas benefit from "extreme conservation" practices, such as daily ranger monitoring and veterinary care.
- VI. *IMPACT* – IMPACT is currently on a restricted-access web-based (Ruby on Rails) platform and is managed by a firm on proprietary software, and contains approximately 37,000 data entries comprising daily health observational information collected since 2010. Data input is performed by Gorilla Doctors staff from handwritten notes of trackers, guides, veterinarians and researchers. Data is extracted on demand in MS Excel™ format.

3. Project Scope and Requirements

- 1) Upgrade IMPACT to gather additional categories of data and to enable functioning on devices for digital data collection, including development of an application to allow daily health observational data collection on handheld devices in the field, with later export/upload of raw data to the cloud-based IMPACT system.
 - i. Help design data input interface for handheld devices that allows for the following additional data categories:
 - a) a severity category for each abnormal entry;
 - b) ability to link photographs obtained with the device to data files;
 - c) automatic entry of date, GPS point, and start of the observation period;
 - d) ability to document a gorilla mortality
 - ii. Advise Gorilla Doctors on the best hardware for use in the field, and support field trials (up to 3 months). The device should:
 - a) be rugged and waterproof,
 - b) have GPS capabilities
 - c) contain a camera
 - d) be able to run both the IMPACT and CyberTracker applications (see www.cybertracker.org)
- 2) Add reporting functionality to IMPACT: Design and program specific reports that will be automatically generated upon “request” of IMPACT by users.
 - i. Design a “dashboard” for user-described custom reports.
 - ii. Create system-generated email alerts to users on set parameters developed in consultation with Gorilla Doctors; the alert should describe the issue by animal group, individual, characteristic and severity. The system will alert must be sensitive to:
 - a) Species
 - b) Gorilla group

- c) individual,
- d) location.

3) Import existing data into new database/system (see 2.VI).

4) Establish an accessible, “universal” gorilla specimen (biobank) database for cataloguing biological specimens from gorillas for broad access, and using available freeware (e.g. LIMS™) for the labelling, cataloguing/inventory and tracking of gorilla specimens.

- i. Tracking will include, but not be limited to: generation of bar codes and labels; a function to follow “generations” of specimens produced from original/stock samples; inventory of stored samples with location and type of storage; when the sample is used (shipped); sample tracking to other institutions and to final disposition
- ii. The system should allow for linking to results of testing or analyses performed on samples.
- iii. The system should have secure access, to allow users to communicate with each other if permission is given, or to work autonomously if desired. It should be able to be translated into multiple languages
- iv. This system should reside in the cloud to enhance data sharing, but also be accessible and usable by locations that have low data storage budgets or have less robust information technology systems.

5. Additional information on project

1) Primary users of this system:

- i. Data input: Guides, trackers, wardens and other park personnel employed in the Virunga Massif of Rwanda, Uganda and the Democratic Republic of the Congo; veterinary and field staff of Gorilla Doctors; veterinary and field staff of cooperating NGOs; and scientific researchers collaborating with Gorilla Doctors.
- ii. Data Outputs: Officials of the Governments of Rwanda, Uganda and the Democratic Republic of the Congo, including wildlife conservation, environmental, tourism, economic development, and public health sectors, and veterinary and human health researchers collaborating with Gorilla Doctors.