

**-Annex A8**

**RESEARCH COLLABORATION OPPORTUNITY**

**Research Collaboration Opportunity Ref No.:** RCO-CUGE-2018-08

**Project Title:** Macaques and Langurs – Diet Analysis, Understand and Model Population Demographics and Home Ranges across Habitats

**1. Key Challenges and Objectives**

- 1.1 Population monitoring of macaques is an important component of work in the management of primate populations in Singapore for biodiversity conservation. Up to date demographics will enable trends to be uncovered and to enable a deeper analysis of the population.
- 1.2 The presence of macaques is known to have various impacts on the forest ecosystem. These impacts have not been qualified through the use of genetics in diet analysis nor have they been quantified in the Singapore context.
- 1.3 We are seeking research proposals to monitor populations of macaques to better understand their impact on the environment and biodiversity
- 1.4 The proposed project should include (but not be limited to):
  - (i) The techniques of population census and monitoring so as to obtain up to date demographics of the macaque and langur population in Singapore.
  - (ii) Understanding the diet ecology of macaques through identification of biodiversity species visually and faeces using either molecular or any other reliable techniques.
  - (iii) Home range tracking studies with the use of radio collar telemetry systems.

**2. Minimum Project Deliverables**

The deliverables described here represent the minimum outcomes arising from the proposed project. Additional relevant deliverables that are proposed will be favourably considered during project evaluation.

- (i) Techniques and datasets of the demographics of the macaque population in Singapore.
- (ii) Biodiversity list and relative frequencies of all the food items detected in at least 400 faecal samples of macaques from at least 10 different sites.
- (iii) Home range analysis of macaques for five adult males and five adult females for at least 7 weeks from at least 3 different sites.
- (iv) Progress reports at end of year 1 and year 2, and final report at end of project.

### **3. Budget Limits**

3.1 The proposed budget cannot exceed \$600,000. Proposals that exceed this limit will not be considered. Please note that this amount is simply an indication of budget availability, not an estimate of expected project cost.

3.2 The project duration should also not exceed 3 years. Proposals requiring more than 3 years can be considered, but with strong justification.

3.3 Please note that NParks' decision on the funding support to be awarded for the project is final.

### **4. Submission Instructions**

Proposals for the Research Collaboration Opportunity as stated above must be submitted to Ms Rekha Mohan at [rekha\\_mohan@nparks.gov.sg](mailto:rekha_mohan@nparks.gov.sg) by 1<sup>st</sup> April 2019, 1200 hrs.

### **5. Enquiries**

For transparency, all enquiries and associated clarifications will be published (without details on the identity of the person making the enquiry) on the Research Collaboration Opportunity page on the CUGE website. We regret that phone enquiries will not be entertained.

For enquiries, please contact Ms Rekha Mohan at [rekha\\_mohan@nparks.gov.sg](mailto:rekha_mohan@nparks.gov.sg) .