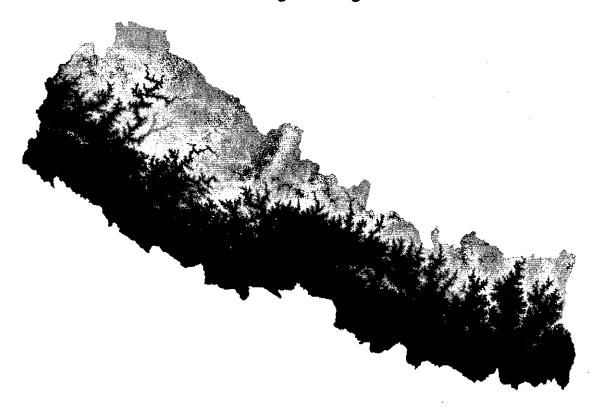
# **Stony Brook University - Birat Nepal Medical Trust**

# Memorandum of Understanding

Nepali Drone Observed Therapy Systems Pilot: Improving Tuberculosis Case-Finding and Diagnostics with Drones



### **Parties**

This Memorandum of Understanding (MoU) is an agreement made between the following parties:

### Party A

The Research Foundation for SUNY on behalf of Stony Brook University / Global Health Institute (referred to as SBU)

### Party B

Birat Nepal Medical Trust (referred to as BNMT)

This agreement at times makes reference to activities, materials, roles, and budgets of other organizations (WeRobotics / Nepal Flying Labs, Nick Simons Institute, National Tuberculosis Center, Ministry of Health and Population). These references are for informational and contextual purposes only. This agreement is made only between the two parties listed above; the roles and budgets should not be considered part of this agreement.

The effectiveness of this MoU is contingent upon approval from the Institutional Review Board (IRB) of Stony Brook University (SBU). Without/until said approval, the terms herein are subject to change insofar as the SBU IRB requires changes.

Project period between SBU and BNMT: 2018-10-01 through 2019-09-30

## **Purpose**

44,000 Nepalis get sick with tuberculosis annually, and 5,000-7,000 die. An estimated 12,000-13,000 incident TB cases go undiagnosed every year (Marahatta 2013). The government has identified "a need to intensify efforts to identify the missing cases in the community". The National Tuberculosis Centre's Strategic Plan for 2016-2021 aims to find an additional 20,000 cases relative to the 2015 baseline (Narsingh 2016).

To reach this goal, innovative means are required, particularly in isolated and hard-to-reach communities. This pilot project aims to improve case finding by linking community health workers (CHWs) with state of the art diagnostic tools (GeneXpert) via unmanned aerial vehicles (UAVs) (aka "drones"). The aim of this project is to assist the MoHP by generating the data necessary to assess the suitability of the approach for nationwide expansion. This MoU outlines a

cooperation framework between the institutions which will oversee, implement and evaluate the pilot programme.

### Roles

The Birat Nepal Medical Trust (BNMT) will be the primary implementing partner. BNMT will coordinate and implement operations. Recruitment and training of supervisory and field staff specific to this project will be made through the BNMT. Materials procurement supplementary to those provided programmatically by the global fund and NTC, such as laboratory supplies, will also be managed by the BNMT. The BNMT will provide subject area expertise, and work closely with Stony Brook University on strategy and evaluation. The BNMT will be the main research partner, and be at the core of all activities.

**Stony Brook University**, through its Global Health Institute, will handle coordination between groups, fund those activities which fall outside of any partner's normal scope, provide data management and analysis, and carry out evaluative research. Stony Brook will provide a project manager role who will spend significant time on-site, and will assist with and organize project operations, data collection, ongoing evaluation, and logistics.

### **Activities**

#### The **BNMT** will:

Oversee the ethical and regulatory approval process with the Nepali MoH Oversee the hiring and training of a cadre of CHWs as well as community mobilisers for the period of July - December 2018.

Oversee the procurement of non-UAV materials.

Oversee and manage all issues related to laboratory testing and diagnostics. Coordinate with the MoHP on all medical and clinical issues.

Liase with relevant stakeholders to ensure co-ordination with global fund related case finding and ensure no duplication of activities.

Carry out active case-finding under the BNMT model in the pilot district. Integrate drones into the transportation chain in the pilot district.

Engage with SBU on matters of research and evaluation.

Submit quarterly progress reports to SBU on budgetary and implementation matters.

Submit the audit report to MoHP after the completion of the project. Make all data regarding diagnostics available in anonymized form to project partners in this MoU.

Adhere to the general principles, policies and best practices for TB case finding and holding, as per the BNMT's MOU with the MoHP in regards to IMPACT TB and TB REACH.

Generate quarterly progress reports for the MoHP and NTC.

Coordinate with all other project partners.

#### SBU will:

Provide the role of "project manager" and take overall responsibility for the project.

Fund all necessary and agreed upon activities outside of partners' normal scope of funded activities, as per the budget.

Manage and oversee regular coordination meetings between project partners.

Enact all services and materials procurement contracts with BNMT and WR/NFL.

Acquire a GeneXpert machine and cartridges.

Oversee research and evaluation of all project activities.

Coordinate between partners, assist in on-the-ground operations, and provide logistical support.

Create and distribute relevant data collection software, capture data, and expose to partners.

Generate knowledge dissemination products for the international research community.

### **Policies**

All parties will conform to international standards for data confidentiality and participant respect.

### **Amendments**

This MoU can be amended on mutual agreement between all parties during the project period.

### Breaches

Failure to comply with the MoU will constitute violation of agreement and lead to automatic termination with 90 days written notice.

No party shall be liable to the other for any special, consequential, incidental, punitive, or indirect damages arising from or relating to any breach of this agreement.

### **Termination**

This Agreement may be terminated by either party, with or without cause by giving thirty (30) days written notice to the other party. The thirty (30) days written notice period shall commence on the date contained within the written notice to the affected party.

Foundation may suspend this Agreement for cause upon ten (10) days written notice; provided, however, that Vendor will have not more than thirty (30) days from the date of such notice to remedy or cure any default or breach upon initial notice from Foundation. Foundation may withhold payments to Vendor for the purpose of set-off until such time as the exact amount of damages may be determined.

If the Vendor shall fail to fulfill in a proper manner its obligations under this Agreement or violates any of the provisions of this Agreement, Foundation shall have the right to terminate this agreement in whole or in part, by sending written Notice of Termination to the Vendor which shall take effect thirty (30) days from the date contained in the written notice.

Upon notification that this Agreement has been terminated or suspended as provided above, the Vendor shall immediately stop all work under this Agreement on the date and to the extent specified in the Notice of Termination. Foundation agrees to compensate the Vendor for all work performed pursuant to this Agreement prior to termination, provided termination is not a consequence of Vendor's breach, default, or failure to perform pursuant to this Agreement.

### **Rights in Work Product**

Material or work produced under this Agreement shall be considered "work for hire," and owned exclusively by Foundation. VENDOR shall not claim or assert any interest, proprietary or otherwise, in any materials or work required to be produced or delivered under this Agreement. VENDOR assigns all rights, title, and interest to such materials and work to Foundation. VENDOR will cooperate and take all necessary action to facilitate such assignment to Foundation.

VENDOR warrants that any material produced pursuant to this Agreement shall be original except for such portion from copyrighted works that: (i) may be included with the copyright owner's permission; (ii) contain no libelous or unlawful statements or materials; and (iii) will not infringe upon any copyright, trademark, patent, statutory or other proprietary rights of others. The publication and dissemination of the knowledge gained from this project will be a shared responsibility of the involved parties; accordingly, the content and authorship of publications will be discussed and agreed upon by all parties in advance of publication.

VENDOR will retain ownership of intellectual property that has been independently developed by VENDOR without Foundation financial support. With respect to this VENDOR-owned intellectual property required to be delivered under the scope of work, VENDOR grants to Foundation a royalty-free, nonexclusive irrevocable license to use such intellectual property in accordance with the Foundation's obligations to Sponsor.

### **Assignment**

VENDOR shall not assign, transfer, contract or otherwise dispose of VENDOR's rights or duties hereunder, in whole or in part, to any other person, firm or corporation without the express written consent of the Foundation. Any such assignment if granted shall be made subject to and consistent with this agreement and Foundation's agreement with the sponsor.

### **Status of Parties**

The relationship of the parties shall be that of principal and Vendor and not of an employer-employee relationship. VENDOR hereby warrants that it is: (i) in compliance with all tax filings and similar requirements imposed on it; and (ii) solely responsible for paying income taxes, FICA taxes, and other taxes and assessments which arise from receipt of payments under this Agreement.

This Agreement shall not be construed to contain any authority, either express or implied, enabling the VENDOR to incur any expense or perform any act on behalf of Foundation without express written consent.

### **Ethical Conduct**

The Foundation strives to maintain the highest ethical standards in all of its operations. All parties acting pursuant to this Agreement will establish standards, policies and procedures of ethical conduct that address, but are not limited to, the areas of conflict of interest, misconduct in science, fraud, abuse and waste.

### Compliance with Laws and Regulations

The parties agree to comply with all applicable laws and regulations in performing the obligations under this Agreement. This includes, without limitation, the Sponsor policies and the express terms of Foundation's agreement with Sponsor, are incorporated by reference herein as a material part of this Agreement even if not specifically set forth in this document. VENDOR and Foundation also agree to comply with the Foundation's Purchase Order requirements, as applicable.

### **Protected Information**

The parties acknowledge that they may possess certain proprietary or confidential information which may be utilized in performance of the Project. "Protected Information" shall mean all such proprietary or confidential information provided by the disclosing party in writing and marked "confidential" or if disclosed orally summarized in writing and marked "confidential" and transmitted to the non-disclosing party within thirty (30) days of oral disclosure.

Protected Information will only be disclosed to the employees, consultants, students or agents (if applicable) who require the same to fulfill the purposes of the research or a need to know and who have read and are obligated to be bound by this clause. The receiving party shall protect the disclosing party's Protected Information with the same standard of care with which the receiving party treats its own Protected Information. Protected Information shall be used by the receiving party only within the scope of this Agreement.

Each party shall, for a period of three (3) years after the termination or expiration of this Agreement, maintain the same level of care to prevent the disclosure of a party's Protected Information, unless otherwise required by law. Upon expiration of the three (3) year period, or upon the request of the disclosing party, whichever is first, the receiving party will destroy all copies of such Protected Information and so certify the same in writing within thirty (30) days. Only one extant copy of such information shall be kept by the receiving party for archival or purposes of audit.

Neither party shall be liable for disclosure or use of the information of the other party if said information was:

- known by the receiving party at disclosing party;
- already generally available to the public, or subsequently becomes so available without default of the receiving party;
- received by a party to this Agreement from a third party who did not acquire it directly or independently from a party to this Agreement in confidence;
- independently developed by the receiving party without the use or reliance on Protected Information, or;
- required to be disclosed by applicable law, court order or regulations of any applicable governmental agency provided that the disclosing party shall give advance, written notice to the other party of the compelled disclosure.

### **Export Controls**

This Agreement shall be subject to all applicable government export and import laws and regulations. The Parties agree to comply and reasonably assist the other party, upon request by that party, in complying with all applicable government export and import laws and regulations. The Parties acknowledge that they may not directly or indirectly export, re-export, distribute or transfer any technology, information or materials of any value to any nation, individual or entity that is prohibited or restricted by the International Traffic in Arms Regulation (ITAR), the Export Administration Regulations (EAR), the Office of Foreign Assets Controls (OFAC), the United States Department of State's State Sponsors of Terrorism, or by any other United States government agency without first obtaining the appropriate license.

VENDOR confirms that the confidential information it discloses does not contain export controlled technology or technical data identified on any US export control list, including but not limited to the Commerce Control List (CCL) at 15 CFR 774 and the US Munitions List (USML) at 22 CFR 121. In the event VENDOR intends to provide Foundation's Project Director with export controlled information, VENDOR will inform Foundation's Administrative Contact in writing thirty (30) days prior to the release of export controlled technology or technical data. VENDOR agrees not to provide any export controlled information to Foundation's Project Director, or others at

Foundation or the State University of New York without the written agreement of Foundation's Administrative Contact. If the U.S. Government imposes a fine or penalty upon Foundation due to VENDOR's failure to notify the Foundation as described above, VENDOR will indemnify and hold Foundation harmless from any resulting fines and penalties from such omission.

### Liability; Indemnification

VENDOR agrees, to the fullest extent permitted by law, to indemnify, hold harmless and defend the Foundation and its directors, officers, employees, consultants, agents and representatives against all claims, causes of action, damages, losses or expenses, including without limitation attorneys' fees, arising out of or resulting from the VENDOR's performance or failure to perform under this Agreement provided such claims are not based upon the negligence or willful misconduct of Foundation.

#### Records

Vendor shall maintain appropriate and complete accounts, records, documents, and other evidence showing and supporting all costs incurred under this agreement. Vendor will insure that appropriate internal controls are in place and properly functioning for the accounts, records and other evidence showing and supporting all costs incurred under this agreement. All accounts and records relating to this agreement shall be subject to inspection by Foundation or its duly authorized representative(s). All accounts and records shall be preserved by the Vendor for a period of six (6) years after final settlement of this agreement. At any time, the Foundation may have vouchers and statements of costs audited by Foundation or Sponsor, or other parties authorized to audit Foundation activities and any payment may be reduced for overpayments or increased for underpayments based on such audit. The system of accounts employed by the Vendor shall be in accordance with the accounting principles required under Foundation's agreement with the Sponsor

### **Insurance**

Vendor shall, at its own expense, maintain insurance of the types and in the amounts specified below.

Commercial General Liability: Bodily injury, Personal Injury, and Property Damage with minimum limit of \$1,000,000 per occurrence and \$2,000,000 aggregate. Limit may be provided through a combination of primary and umbrella/excess liability policies;

Auto Liability (if applicable): \$1,000,000 combined single limit Bodily Injury/Property Damage per each accident (including owned, hired, leased and non-owned autos)

Professional Liability (medical care, if applicable): Limits of liability greater than \$1,000,000 each claim and \$3,000,000 aggregate

Vendor shall notify Foundation (30) days prior to termination or material change of any policy.

If Vendor fails to maintain Insurance, Vendor shall promptly notify Foundation and Foundation reserves the right to issue a stop-work order until Vendor is in compliance with the above requirements.

Vendor shall provide evidence of such in the form of Certificates of Insurance upon request. If self-insured, these certificates should note any self-insured/deductible amounts for each policy.

Vendor waives all rights of subrogation to the extent damages are covered by the above described policies.

# Signatures

The parties affirm to know, understand and agree to all articles of this MOU as negotiated together.

| The Research Foundation for SUNY on be | half of Stony Brook University |
|--|--------------------------------|
| Name and Position: Lyle 1. Gane        | <u>r</u>                       |
|  | Date: <u>9-13</u> -19          |
|  |                                |
| Birat Nepal Medical Trust              |                                |
| Name and Position:                     |                                |
| Signature:                             | Date:                          |

# **Appendix 1: Project Agreement**

### Proposal submitted by

Birat Nepal Medical Trust (BNMT Nepal)

Lazimpat-2, Kathmandu, Nepal

Phone: +977 01 4441918

Fax: +977 01 4439108

Email: scgurung@bnmt.org.np

Contact person: Suman Chandra Gurung

## Name of the project

Nepali Drone Observed Therapy Systems Pilot: Improving Tuberculosis Case-Finding and Diagnostics with Drones

# Name and address of supporting party

Stony Brook University, Stony Brook New York, USA

## Background

44,000 Nepalis get sick with tuberculosis annually, and 5,000-7,000 die. An estimated 12,000-13,000 incident TB cases go undiagnosed every year (Marahatta 2013). The government has identified "a need to intensify efforts to identify the missing cases in the community". The National Tuberculosis Centre's Strategic Plan for 2016-2021 aims to find an additional 20,000 cases relative to the 2015 baseline (Narsingh 2016).

To reach this goal, innovative means are required, particularly in isolated and hard-to-reach communities. This pilot project aims to improve case finding by linking community health workers (CHWs) with state of the art diagnostic tools (GeneXpert) via unmanned aerial vehicles (UAVs) (aka "drones"). The aim of this project is to assist the MoHP and NTC by generating the data necessary to assess the suitability of the approach for nationwide expansion. This MoU outlines a cooperation framework between the institutions which will oversee, implement and evaluate the pilot programme.

## **Objectives**

### **Primary objectives**

The objectives of the Nepal DrOTS program are three-fold:

Establish an "on-demand" drone service in the mountainous/hilly area, which includes an appropriately equipped and staffed base camp and a cadre of health workers who are able to request a drone when appropriate, manage the drone and related technology upon arrival, and launch the drone for its return flight.



Remotely Diagnose TB: The same cadre of health workers will be trained to recognize TB symptoms in people, explain to them the need for testing, and safely obtain quality sputum samples to be flown via drones for TB diagnosis with rapid molecular diagnostics.

Remotely Observe TB Therapy and improve case holding– By combining conventional health provider interaction and innovative technologies, we will monitor patients during their TB

treatment for adverse drug reactions, ensure medication adherence, and assess trends in symptoms. We will implement patient-centered care for the entire follow-up period, so as to reduce case loss during the period after which a patient feels better.

### Secondary objectives

Our secondary objectives are (i) to educate and empower local partners to assume full ownership of the DrOTS program, so as to ensure its sustainability after the project ends; and (2) to generate evidence regarding the feasibility, acceptance, and cost-effectiveness of the DrOTS program, with a focusing on informing an eventual scale-up of its services nationwide.

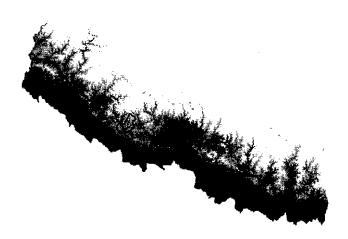
### Vision

Assist and empower the National Tuberculosis Programme in identifying an additional 20,000 patients annually with TB by 2021, reducing TB incidence to 1 per 1,000,000 by 2035, and eliminating TB transmission in Nepal by 2050.

# **Project location**

This MOU and project proposal covers the period only through the end of September 2019 (through December 2019 if delays occur), during which there will be only one site for the pilot: **Pyuthan district**. Depending on the effectiveness and suitability of the project, it is foreseeable that there will be an expansion phase (April 2019 and beyond) in which additional districts are covered. However, in this

case, all work will be covered in a separate MOU and project proposal, developed in conjunction with the MoHP and BNMT.



# **Project period**

The pilot project will take place during the 12 month period from 1st October 2018 through 30 September 2019.

# Project phases, activities and deliverables

Phase A: Training, preparation, ground operations, and trial flights January 2019 - 31 March 2019 (3 months):

Phase 1 commences after the signing of contracts, and the establishment of funding mechanisms for the various partners. This phase has two main activities: (i) the training of community health workers via BNMT; and (ii) administrative work related to flight activities.

The training of community health workers (CHWs) via BNMT will ideally begin in July, so as to capitalize on an already existent 30 person network of CHWs on-site. Purchase of equipment for data collection and information dissemination (tablets and phones) and of laboratory and medical equipment for specimen collection and transport will be carried out.

Communication, and administrative work related to flight permissions will be carried out by Nepal Flying Labs.

Concurrent to training and administrative work, flight plans will be developed, as well as SOPs and contingency plans.

#### Deliverables

- 1. NFL: Apply for approval by relevant ministry(ies) to import drones and fly autonomously (not only line of sight).
- 2. BNMT: Detailed preparation of internal planning documents and protocols for standard operating procedures for CHWs.
- 3. BNMT: CHWs trained and ready to engage in on-demand sputum transport.
- 4. BNMT/SBU/NFL: Procurement and importation of materials.
- 5. BNMT: Ethical approval for Phase 2 operations from NHRC.
- 6. BNMT: Hiring of staff, associated planning meetings, and all budget items associated with phase 1.
- 7. SBU: Development of data collection tools.

### Phase B: Combined ground-air operations

### 1 April 2019 - 30 June 2019 (3 months):

The "Pilot" phase is intended as a time to ensure that all individual components of the program work at one site: that the drones fly, that the mechanisms for making payments to partners and paying wages in-country work, that the laboratories perform their duties, that the data collection tools are functional, that educational technology (phones+tablets with video curricula) are programmed and deployed, and that our legal status is solid, etc. In other words, all the activities in this phase are geared towards achieving one thing: the production of a Nepal DrOTS Minimal Viable Product (MVP), ie a bare-minimum (but fully working) program at one site (Pyuthan district).

Carrying out the MVP will be iterative, and highly contingent on the successes and failures of prior sub-processes, as well as the ongoing input of the supervisory, consultative and implementing partners. That said, in a general sense, pilot will require the following activities:

Establishment of an in-country presence (office, etc.) by program manager. Purchase of resources (both physical and virtual) for data collection, management, and real-time analysis. - Training of staff involved at each step of the DrOTS process (flying, suspect case identification, laboratory diagnostics, data management).

On-the-ground recruitment of partners/champions from local communities.

#### Deliverables:

- 1. BNMT: Acquisition and establishment of an on-site office (shared).
- 2. SBU: All main roles receiving funding either directly (through employment/grants) or indirectly (through partnership contracts).

- 3. SBU: Data collection and educational software deployed, tested, re-deployed.
- 4. BNMT/SBU/NFL: Successful "full cycle": remote flagging of suspect TB case, drone call, specimen transport, diagnosis, treatment initiation, remote treatment monitoring.
- 5. BNMT: Hiring of staff, associated planning meetings, and all budget items associated with phase 2.
- 6. NFL: Provision of on-demand flying services (piloting, route planning, data collection, delivery) from Pyuthan Hospital to all suspect TB cases in the district.
- 7. SBU: Write-up of SOP / protocol for proposed expansion within government programs.

### Phase C: Combined ground-air operations

### 1 July 2019 - 30 September 2019 (3 months):

This is a continuation of Phase B, but different in two ways: (i) WeRobotics will no longer manage air operations (they will be transferred to local staff fully), and (ii) all operations should be systematized sufficiently that they no longer require tweaking, experimentation, or changes.

## **Project funding**

### Source of funding

All funds will be provided by the Global Health Institute of Stony Brook University.

### Fund-flow mechanism

Funding will be through direct implementation. The funder (SBU) will make preagreed, deliverable-linked payments to the implementing partner (BNMT) and drone partner (Nepal Flying Labs).

#### Total amount:

BNMT will receive \$193,290.80 from SBU to cover project activities and materials.

WeRobotics will receive \$106,909 from SBU to cover project activities and materials. In addition, WeRobotics will provide \$73,388 in "in-kind" contributions (salary support, travel, etc.) to the project.

#### **Details:**

The breakdown of project expenditures for BNMT and WR is at the end of this document in the "Itemized Budgets" section.

### Payment dates:

Payments to BNMT will be dispersed 4 times.

- 1. October 1, 2018: \$39,179.20 to BNMT
- 2. December 1, 2018: \$50,000 to BNMT\*
- 3. February 15, 2019: \$50,000 to BNMT\*
- 4. May 15, 2019: \$54,111.60 to BNMT\*

Payments to WeRobotics will be dispersed 2 times:

- 1. October 1, 2018: \$33,760 to WR\*
- 2. January 15, 2019: \$73,149 to WR\*

Payments may require prior approval from the SBU IRB or other internal SBU accountability/approval mechanisms, as well as approval from the funder. Though payments are expected to be carried out on time, delays are possible. In the case of delays, SBU will make every effort to carry out the payment as soon as possible after the intended dates.

\* Payments will be carried out upon the satisfactory completion of deliverables and budget items, or satisfactory progress towards their timely completion.

The final payments are conditional upon project funds remaining. Though the current budget should allow for all project activities, unforeseen expenditures or over-spending in any area may require that the final payments be adjusted.

In the case of delays or non-completion of project deliverables, payments may be withheld or reduced following discussion and agreement by both parties on revised budget and deliverables. Likewise, in the case of unforeseen expenses or greater than expected project scale and speed, payments may be increased in size or advanced in timing in order to support partners' needs.

All project related expenditures (salaries, purchases, etc.) should be itemized and tracked, for auditing and accountability purposes.

Funding associated with budget items which are not executed, deliverables which are not carried out, or purchases which are not made, will be returned to the funder.

# Reporting requirements

All reports will be made available to all partners. Progress reports will be prepared and submitted quarterly. This final project report will be prepared and submitted after completion of the whole project, and will incorporate outcomes, expenditures, and recommendations.

# Publications, press, and publicity

**Publications:** The parties agree to full and open collaboration with co-authorship on relevant papers according to international authorship norms, specifically the ICMJE recommendations regarding the roles of authors and contributors.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup>http://www.icmje.org/recommendations/browse/roles-and-responsibilities/defining-the-role-of-authors-and-contributors.html

Press and publicity: In interactions with the press, on social media, and in publicity materials, the parties will make reasonable efforts to coordinate and attribute credit to the implementing organizations (SBU, BNMT, NFL), funders (NSF), and government partners, to the extent that the aforementioned wish to be acknowledged. If in doubt or in disagreement regarding how or whether to attribute credit in certain cases, the parties will explicitly seek input from one another and work to ensure that appropriate credit is given.

## Exit plan

During project implementation BNMT Nepal will strengthen the health service system through capacity enhancement of health personnel. Similarly, local drone services (through NFL) will be funded and capacitated, as well as linked to health services. Upon the completion of the pilot, and during the intended post-pilot expansion phase, results of the pilot will be disseminated and discussed with policy makers and relevant stakeholders in the community and governance, to devise a locally-led continuation/expansion strategy if appropriate.

# Signatures

The parties affirm to know, understand and agree to all articles of this project agreement as negotiated together.

| Birat Nepal Medical Trust  |               |
|--|---------------|
| Name and Position:   | _             |
| Signature:   | _ Date:       |
| The Research Foundation for SUNY on behalf of Name and Position: Lyle f. Gours  Signature: | _ <del></del> |

# **Itemized Budget**

See <a href="https://docs.google.com/spreadsheets/d/1wYl-yuZ3gmCr39d03Gef0wv8R5pistgP0tOs8FbEcQI/edit#gid=0">https://docs.google.com/spreadsheets/d/1wYl-yuZ3gmCr39d03Gef0wv8R5pistgP0tOs8FbEcQI/edit#gid=0</a>

### References

Marahatta, Sujan. 2013. "Epidemiology of Tuberculosis in Nepal." Conference Paper.

Narsingh, Kedar. 2016. "National Tuberculosis Program, Annual Report." Government of Nepal, Ministry of Health. http://nepalntp.gov.np/wp-content/uploads/2018/03/Final-Annual-Report-NTPN-2018.pdf.