

PRELIMINARY PROPOSAL TO BUILD A CANCER SUPPORT CENTER AT THE BUTARO CANCER CENTER OF EXCELLENCE (RWANDA)

November 10, 2015

We have the opportunity to help dramatically expand the number of cancer patients served at the Butaro District Hospital in rural northern Rwanda.



In 2012, Rwanda's Ministry of Health, Partners In Health / Inshuti Mu Buzima, the Jeff Gordon's Children Foundation, and Harvard's Dana-Farber/Brigham and Women's Cancer Center opened the Butaro Cancer Center of Excellence at the BDH, the first comprehensive cancer care facility in rural East Africa. Since opening, the BCCOE has provided in-patient and out-patient services to over 3,000 patients referred from across the region.

One of the critical impediments to the expansion of the number of patients served at the BCCOE, and one of the critical causes of successful outcomes lost to follow-up, is the absence of adequate on-site housing for patients and their caregivers/families. Cancer treatment often necessitates that patients remain at the hospital overnight or for several days. Since most patients at BCCOE travel long distances for their treatment, without adequate housing, many patients simply stay in the cancer ward—thereby limiting the new patients who can be accommodated—and their families/caregivers often sleep outside on the ground. And, others simply do not return for their follow-up treatment.

PIH/IMB and the Dana-Farber Cancer Institute have asked our help in building an on-site Cancer Support Center that would provide—

- overnight accommodation for new patients (and their families/caregivers) seeking initial consultation and biopsy:
- overnight accommodation for ambulatory care patients receiving infusion/chemotherapy (and their families/caregivers); and
- support facilities, including lavaratories, laundry, kitchen/cafeteria for nutritional assistance, and group counseling rooms for educational workshops, support groups and social assistance.

WHAT HAVE BEEN OUR PHILANTHROPIC GOALS THAT HAVE CAUSED US TO SEARCH FOR OPPORTUNITIES LIKE THIS?

- to provide funding for programs that address the problems of disadvantaged people and/or children with medical needs... with ties to the New York/New Jersey and/or eastern Massachusetts areas
- to maximize the measurable impact of our funding through a substantial, multi-year commitment to a particular project (with low overhead)

WHAT HAS OUR SEARCH INCLUDED?

- Phase 1 (Q1 2015) preliminary exploration of organizations funded by Greenlight Foundation, various other smaller not-for-profit organizations in Boston focused on healthcare, and major notfor-profit organizations in Boston focused on healthcare
- Phase 2 (Q2/Q3 2015) focused work in the area of Global Health Equity a movement developed and led globally largely by healthcare leaders in Boston and Seattle, focused on reducing disparities in disease burden and treatment outcomes among patients domestically and abroad
 - extensive discussions with Partners In Health and the Dana-Farber Cancer Institute, and on-site meetings at the BCCOE and at PIH/IMB's headquarters in Rwinkwavu, Rwanda



WHAT WORK HAS BEEN DONE AND WILL BE DONE ON THE SPECIFIC PROPOSAL TO BUILD A CANCER SUPPORT CENTER?

- Substantial work to assess the specific needs and to develop a conceptual design for a solution
 was undertaken by PIH/IMB personnel, in collaboration with the Ministry of Health, the local
 government and MASS Design.
- The conceptual design contemplates an on-site Cancer Support Center comprising 5 buildings, carefully designed and sited to maximize infection control and personal comfort and to provide a healing environment. This Cancer Support Center would be expected to accommodate up to 3,000-4,000 patients per year (and their families/caregivers)... PIH/IMB currently believes that this Cancer Support Center would meet all of the critical identified needs through the next period of growth of the BCCOE.
- PIH/IMB currently believes that this Cancer Support Center may be able to be constructed and opened within 12-24 months, within a total cost of \$400,000 (including construction cost, design services, construction administration and FFE).
- Once preliminary funding is secured, work will continue for the next 2-3 months to confirm land access and suitability, and to confirm cost and project parameters through pursuit of RFP process for design, construction management and construction.



Design Priorities

Butaro Cancer Support Center



Infection Control

Natural Ventilation

The overall geometry of the building can be configured to maximize the amount of natural ventilation potential via wind and stack effect.

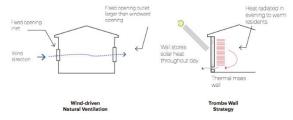
Generally, naturally ventilated buildings must be narrow in the dimension parallel to the direction of the airflow and they must be sited where wind obstructions are

Thermal Mass + Trombe Wall

By constructing a heavy masonry wall on the module's south facing facade, solar heat will be collected throughout the day and s'owly released during cooler night hours.



Ventilation across bunk cubby unit due to low vents and clerestory roof design.



Diagrams of Building Strategies for Natural Ventilation.

Partners in Health // MASS Design Group



WHAT MAKES THIS PROJECT ESPECIALLY COMPELLING?

- The Cancer Support Center focuses directly on disadvantaged patients with serious unmet medical needs
- This project works through or in concert with Boston-based organizations who are leaders in the field of Global Health Equity
- The Cancer Support Center maximizes measurable impact through incredible cost advantages... and through leverage (through matching funding provided collectively by two individuals)
- Our funding would be tax advantaged as a "sponsorship" (see http://www.pih.org/partnerships)

WHAT'S THE ASK?

- \$50,000 in 2015 a small portion may be applied to site evaluation work and additional design work, leading to a comprehensive final proposal in early 2016
- subject to the firm's confirmation that the comprehensive final proposal meets the firm's overall budget and programmatic guidelines (including siting, prioritization of usage, design and design partner, project oversight, project funding, etc.), \$50,000 in each of 2016, 2017 and 2018
- note: all of these amounts are expected to be within the firm's normal budgeted amounts for philanthropy and sponsorships (and could be accommodated without impacting tentative allocations for continuing commitments); our expectation is that on-going operational budget for the Cancer Support Center would be provided locally, although we might consider assisting with 1st and 2nd year costs if the project is completed within our maximum allocation