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Re: Replicable eye care centers – Grant proposal

To whom it may concern,

Here you will find a proposal for introducing a new approach to curing blindness in developing nations that is both comprehensive and sustainable. It is a 5-year scalable plan to develop replicable and standardized eye care centers that will result in approximately 12,000 cataracts performed, 5 permanent and sustainable eye care centers, and provision of comprehensive eye care to communities that previously had none at a total cost of \$6,721,000.

One World Sight Project efforts always have an emphasis is on relief, ensuring that blindness will always be permanently cured at every funding level. However, in the big picture, carefully planned development is the only way to bring about widespread, long-term, and sustainable relief.

Give a starving country food, and some people may not immediately die of starvation – as long as people can be found to keep on giving, and as long as the relief supplies actually get to the people in need without being expropriated by others or rotting on the docks because of lack of transportation. However, when the relief stops, the next generation will surely continue to starve.

In fact, immediate relief without the goal of sustainable development can even be counter-productive in the long-term by utilizing scarce resources and discouraging national governments and even those we want to help from participating in future initiatives.

That is why this proposal has an emphasis on the development of a new paradigm that has the potential to revolutionize the provision of eye care for millions.

Thank you for evaluating this preliminary proposal.

Sincerely,

Richard Weiss, M.D.
President and Founder, One World Sight Project, Inc.

Enc. Preliminary Proposal For A New Paradigm Of Eye Care

Appendix A. Estimated detailed budget for three years

**Preliminary proposal for a new paradigm:
Replicable Eye Care Centers in Africa and beyond**

- I. Executive Summary
- II. The Aravind model - selling cataracts like McDonald's –
- III. LV Prasad Eye Care System model – comprehensive eye care at all levels
- IV. Modular eye care unit strategy
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I. Executive Summary

Bottom line – we are trying to improve the way that eye care is delivered in Africa and beyond. There is no doubt that the most difficult and discouraging reality is that most people who go blind from cataract in Africa will remain blind the rest of their lives for want of simple surgery. This will not change for generations! The major reason is that the rural poor in particular have virtually no access to safe and effective surgery, because the real ratio of ophthalmic surgeons to populations is probably 1: 10 million. For example, there are more eye surgeons in San Francisco than the entire continent of Africa. The situation in Africa is about two to three orders of magnitude worse than Asia. And, at the rate they are trained, and migrate out of Africa, there is not a practical solution in sight. Despite the best efforts of the world's eye care organizations, the world is becoming more blind!

What could make a difference? Establishing a network of McDonald's-like franchised cataract surgical training centers throughout Africa that will teach just this one skill. These centers could supervise more remote satellite surgical centers manned by the training center's graduates and guarantee their efficiency, efficacy, safety and quality. It could revolutionize the whole issue of cataract blindness in Africa, rather than pick away at it one scab at a time! This is our larger vision, and initially we plan to create a 'proof of concept' pilot project of 5 coordinated modular cataract training facilities (including training in community ophthalmology) in Tanzania at an initial cost of \$7.5 million dollars over three years in partnership with the Kilimanjaro Center for Community Ophthalmology (KCCO) or another reputable and established African eye care center.

We want to take relevant aspects of the Aravind model (increase capacity with systems standardization and outreach to meet demand for services and becoming financially self-sufficient) and the LVPEI Eye Care Pyramid (delivery of comprehensive eye care at all levels, with the establishment of permanent infrastructure for large populations) and put them together with replicated adaptable modular eye care treatment and training units. We anticipate that these facilities, together with a clear path toward financial sustainability, will be a strong incentive to keep trained eye care teams in their native countries (a significant problem). We also intend to provide immediate relief as well as development.

II. The Aravind model - selling cataracts like McDonalds

We want to establish that Dr. Venkataswamy's original idea of 'selling cataracts like McDonald's sells hamburgers' can be successfully applied to Africa as it has in some parts of India by adapting various aspects of the Aravind model to locations in Africa and create a system that can be scaled throughout the continent.

McDonald's system places heavy emphasis on standardization, which produces economy of scale in all areas: training, procedures and methods, facilities, equipment and supplies, advertising (which Dr. V. saw as community outreach) and support. Also, the franchise is run as a business, with a clear plan toward financial success (sustainability).

It is interesting to note that Dr. V. founded Aravind at age 52, and Ray Kroc founded McDonald's at age 55. When Ray Kroc secured the rights to McDonald's, he didn't go to work "in" a McDonald's "restaurant". He went to work "on" McDonald's "the business". To Kroc, the first McDonald's restaurant was just a model or prototype that could be reproduced again and again in cities and towns all over the country. He analyzed every operational function of the original McDonald's from purchasing to prep to the cooking and cleaning.

Because consistency ruled the day, and by following the McDonald's sophisticated operating and delivery system with a comprehensive set of standards and procedures, he enabled franchisees to give their customer the same food and service as the original McDonalds and also give them the best shot at becoming successful business owners.

Almost all standardized aspects of the McDonald's system have corresponding aspects to our proposed replicated eye care system:

- Training – surgeons, administrators, community outreach, ancillary personnel
- Administrative procedures – billing and accounting, forms, oversight and analysis
- Cataract surgery methods – appropriately optimized for successful outcomes
- Facilities – standardization of facilities by means of an adaptable modular design is a concept unique to the Eyes of Africa initiative.
- Equipment and supplies – better pricing and no need to reinvent the wheel

III. LV Prasad Eye Care System - comprehensive eye care at all levels

L V Prasad Eye Institute, Hyderabad, India, was established in 1987 with the aim of bringing world-class eye care to those most in need, irrespective of ability to pay. The Institute since its inception has grown into a globally renowned tertiary care eye centre, with activities spanning patient care, research, rehabilitation, training, product development and community eye health. It is a World Health Organization Collaborating Centre for the Prevention of Blindness and a global resource centre for VISION 2020: The Right to Sight.

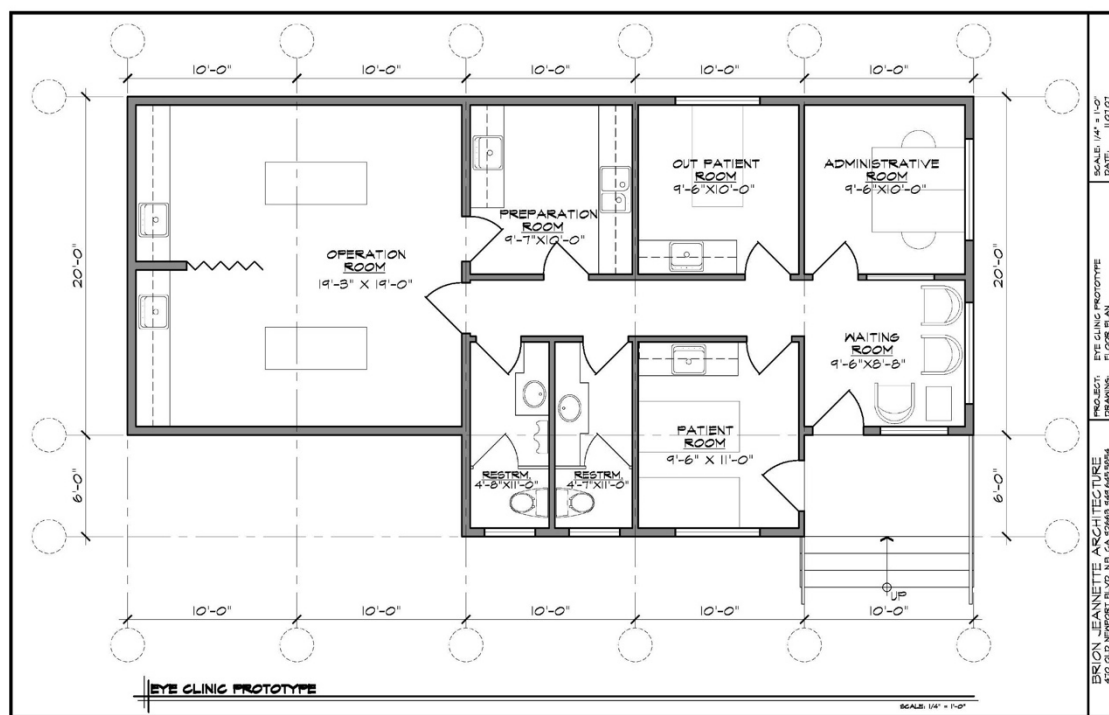
What makes LVPEI different from all the other excellent centres of eye care the world over? It is not just the fact that it has demonstrated that equity can exist hand in hand with excellent and efficient health care systems. But it is in the manner that this has been brought about, and in the systems that

have been put into place to ensure that such care can be provided in a sustainable manner that also builds local capacity. One of the major limiting factors in the combat against blindness in the developing world is the lack of appropriate infrastructure for the delivery of eye care. LVPEI's model of eye care envisages—and implements—delivery of comprehensive eye care at all levels, with the setting up of permanent infrastructure.

The LVPEI system, in practice today, spans the gamut of eye care, from advanced tertiary in the city of Hyderabad, to primary care in the remotest villages of Andhra Pradesh, and a growing network linking tertiary through secondary to primary care in other parts of the country as well.

We expect to adapt many of the successful aspects of this system to Africa, particularly the emphasis on the planning of the provision of sustainable comprehensive eye care to large populations.

IV. Modular eye care unit strategy and floor plan – one example



This is a preliminary modular eye care center that consists of 10x20' and 10'x26' modules, that can be fit together to form a standardized structure that is also adaptable to the need to the specific location where it is to be used while still taking advantage of economy of scale in planning and construction costs. It can be built for a cost of \$250,000 at most – probably less with materials and construction in Nairobi or Johannesburg, and substantially less with significant volume.

The structure would be able to be easily modified to include sleeping areas of patients and their families that had to travel long distances for surgery or examinations, more administrative areas or patient screening areas if needed, a dispensary for spectacles, etc. Awnings could be attached to the

outside of the structure to accommodate a larger waiting area. A successful eye care modular facility could easily be expanded to provide for other health care needs.

Issues to be researched include: local building codes and permits needed, and the specific detail needed for the architectural drawings, utility hookups including water, sewage, power, gas, ventilation, parking and trash disposal. But when these issues are researched and resolved, the solutions could be readily scaled to a large number of centers without re-inventing the wheel each time.

V. Strategies for the achievement of sustainable programs

One World Sight Project supports the World Health Organization (WHO), VISION 2020 and the International Agency for the Prevention of Blindness in their efforts to reverse the increasing incidence of preventable and treatable blindness in the world, and specifically supports the following WHO strategies for the achievement of sustainable programs:

1. Obtain baseline data on blindness and its causes in countries where this is still needed for program planning.
2. Establish and maintain blindness prevention as a priority issue.
3. Develop eye care as part of primary health care.
4. Increase public awareness and mobilize more community support for eye care and blindness prevention schemes.
5. Create a manpower development situation that makes full use of available resources.
6. Monitor and evaluate all national programs.

VI. Budget, time frame, projected impact (see Appendix A for details)

We are requesting three years of financial support for a total funding request of \$7,481,000. Three years of support is needed so that minimal resources are taken up with fund raising during this initial phase. This assumes \$2,522,000 for year one, \$1,952,000 for year two (no large relief effort in year two), and \$3,007,000 for year three. We anticipate that the number of cataract surgeries performed by the replicated units will increase dramatically from year one to year three as early centers get up to speed.

In the same way that doubling a penny on a chessboard doesn't seem like many pennies in the beginning but becomes overwhelming by the last squares, as these replicated training and treatment centers are put into operation their impact will grow significantly. We anticipate that the centers will be financially self-sustaining at about three years if a dispensary for spectacles is included in the facility.

The projected numbers of cataracts performed and number of centers in place at the end of the first five years assuming that in year 4 and 5 no new facilities are built or transported, no additional vehicles are purchased, less initial training and systems research is needed, and progress is made toward financial self-sufficiency:

<u>Year</u>	<u>Centers created</u>	<u>Cataracts</u>	<u>Budget</u>
1	1	100	\$1,452,000
2	2	700	\$2,032,000
3	2	2200	\$2,237,000
4	-	4000	\$500,000
5	-	5000	\$500,000
Totals	5	12,000	\$6,721,000

Assumptions: Cataracts/center year 1 100
 Cataracts/center year 2 500
 Cataracts/center year 3 1000

These estimates do not even take into account the provision of comprehensive eye care to communities that previously had none. The real impact of this proof of concept project, if successful, is inestimable. A tested system of replicable modular facilities could be used by all NGOs throughout Africa and beyond. In any case, blindness would be cured in thousands – always a worthy goal.

We need to try something new. We know that the present global eye care system is NOT working, or not working fast enough to reverse the fact that an estimated one million more people are going needlessly blind each year despite the total work of all the eye care organizations put together!

VII. Summary

We propose adding modular eye care treatment and training facilities to systems standardization and community outreach in a pilot project that, if successful, can be scaled to improve the delivery of eye care throughout Africa and beyond.

VIII. Appendix A – Detailed budget for first three years

	Year One	
1	<u>Modular Units x 1</u>	\$350,000
	Construction @ \$250,000 X 1 = \$250,000	
	Furniture and equipment @\$100,000 X 1 = \$100,000	
2	<u>Local personnel for construction/transport of units</u>	\$80,000
3	<u>Salaries of modular hospital staff @ \$15,000 X 1</u>	\$15,000
4	<u>Supplies: office and medical/surgical x1</u>	\$50,000
5	<u>Program support to Ministry of Health (surgeons and nurses)</u>	\$100,000
6	<u>Vehicles (Land Rover or Toyota) @ \$50,000 X 1</u>	\$50,000
7	<u>Training of modular hospital directors @ \$25,000 X 3</u>	\$75,000
	Includes travel to South Asia for training and stipend	
8	<u>Communication outreach</u>	\$150,000
	Includes the development and publication of materials, radio and print advertisement (TV as appropriate) for cataract campaigns, new modular hospitals, and blindness-related activities	
9	<u>Program evaluation</u>	\$100,000
	Includes cost for evaluation personnel, travel for OWSP staff	
10	<u>In-country partner salaries and expenses</u>	\$100,000
11	<u>OWSP staff salaries and benefits</u>	\$240,000
	Full-time project director, 25-50% for executive director	
12	<u>Administration</u>	\$92,000
	Includes travel: 2 program-related trips each for project director and executive director to project sites @ \$7,000 X 4 =\$28,000	
	Travel to US and international meetings: \$14,000	
	In-country support, including drivers: \$8,000	
	US office rental, equipment and supplies: \$42,000	
13	<u>Consultants</u>	\$50,000
	Includes systems and operational research, chartered accountant, and auditor	
	<u>Total Budget Year 1</u>	\$1,452,000

	Year Two	
1	<u>Modular Units X 2</u>	\$700,000
	Construction @ \$250,000 X 2 = \$500,000	
	Furniture and equipment @\$100,000 X 2 = \$200,000	
2	<u>Local personnel for construction/transport of units</u>	\$80,000
3	<u>Salaries of modular hospital staff @ \$15,000 X 3</u>	\$45,000
4	<u>Supplies: office and medical/surgical @ \$50,000 x 3</u>	\$150,000
5	<u>Program support to Ministry of Health (surgeons and nurses)</u>	\$150,000
6	<u>Vehicles (Land Rover or Toyota) @ \$50,000 X 2</u>	\$100,000
7	<u>Training of modular hospital directors @ \$25,000 X 3</u>	\$75,000
	Includes travel to South Asia for training and stipend	
8	<u>Communication outreach</u>	\$150,000
	Includes the development and publication of materials, radio and print advertisement (TV as appropriate) for cataract campaigns, new modular hospitals, and blindness-related activities	
9	<u>Program evaluation</u>	\$100,000
	Includes cost for evaluation personnel, travel for OWSP staff	
10	<u>In-country partner salaries and expenses</u>	\$100,000
11	<u>OWSP staff salaries and benefits</u>	\$240,000
	Full-time project director, 25-50% for executive director	
12	<u>Administration</u>	\$92,000
	Includes travel: 2 program-related trips each for project director and executive director to project sites @ \$7,000 X 4 = \$28,000	
	Travel to US and international meetings: \$14,000	
	In-country support, including drivers: \$8,000	
	US office rental, equipment and supplies: \$42,000	
13	<u>Consultants</u>	\$50,000
	Includes systems and operational research, chartered accountant, and auditor	
	<u>Total Budget Year 2</u>	\$2,032,000

	Year Three	
1	<u>Modular Units X 2</u>	\$700,000
	Construction @ \$250,000 X 2 = \$500,000	
	Furniture and equipment @\$100,000 X 2 = \$200,000	
2	<u>Local personnel for construction/transport of units</u>	\$80,000
3	<u>Salaries of modular hospital staff @ \$15,000 X 5</u>	\$75,000
4	<u>Supplies: office and medical/surgical @ \$50,000 x 5</u>	\$250,000
5	<u>Program support to Ministry of Health (surgeons and nurses)</u>	\$150,000
6	<u>Vehicles (Land Rover or Toyota) @ \$50,000 X 2</u>	\$100,000
7	<u>Training of modular hospital directors @ \$25,000 X 4</u>	\$100,000
	Includes travel to South Asia for training and stipend	
8	<u>Communication outreach</u>	\$200,000
	Includes the development and publication of materials, radio and print advertisement (TV as appropriate) for cataract campaigns, new modular hospitals, and blindness-related activities	
9	<u>Program evaluation</u>	\$100,000
	Includes cost for evaluation personnel, travel for OWSP staff	
10	<u>In-country partner salaries and expenses</u>	\$100,000
11	<u>OWSP staff salaries and benefits</u>	\$240,000
	Full-time project director, 25-50% for executive director	
12	<u>Administration</u>	\$92,000
	Includes travel: 2 program-related trips each for project director and executive director to project sites @ \$7,000 X 4 = \$28,000	
	Travel to US and international meetings: \$14,000	
	In-country support, including drivers: \$8,000	
	US office rental, equipment and supplies: \$42,000	
13	<u>Consultants</u>	\$50,000
	Includes systems and operational research, chartered accountant, and auditor	
	<u>Total Budget Year 3</u>	\$2,237,000
	<u>Total Budget Years 1-3</u>	\$5,721,000