



**Center of Excellence
in Vision Rehabilitation and Low Vision Services**

**PROGRESS REPORT
UPDATE**

December 2010

Refer to page 7 for 2012 update

Miami Lighthouse Center of Excellence Transforms Lives

Miami Lighthouse established five Center of Excellence initiatives in 2008, to be accomplished through public and private support in 2008-2012:

Mobile Outreach
Low Vision Clinic
Assistive Technology Center
Living Laboratories
Children's Services

- Expand **Mobile Outreach** and low-vision services to children and adults.
- Create a **Low Vision Clinic** that trains adults, especially senior citizens, how to use their remaining vision and how to use assistive devices.
- Serve as the preeminent **Assistive Technology Center** for new technologies for the blind and visually impaired.
- Address critical work force shortages for vision rehabilitation and education professionals, building on current collaborations to create **Living Laboratories** for education and research.
- Offer year-round **Children's Services** programs for infants and children who are blind or visually impaired, in keeping with the goals outlined in the *National Agenda for the Education of Children and Youths with Visual Impairments*.

Miami Lighthouse is on track with all of these initiatives, though funding gaps still exist. Thanks to our donors and grantors, some of the Center of Excellence initiatives are ahead of schedule. The Miami Lighthouse Center of Excellence in Vision Rehabilitation and Low Vision Services is now a reality, transforming the lives of far more clients than would have been thought possible only a few years ago. CEO Virginia Jacko reports quarterly to the Miami Lighthouse Board of Directors on milestones reached on each of the five initiatives, including funding. Articles in peer-reviewed scholarly journals and presentations at national professional and academic conferences attest to the growing national reputation Miami Lighthouse is achieving through these initiatives.

The need for our services is growing, too. The number of clients we serve each year has increased five-fold since 2007. We have achieved a great deal for blind and visually impaired people in our community, but we need to do much more. Building expansion is a necessary component of the future success of Miami Lighthouse; our rapidly growing programs will require expansion of the fourth floor addition, as well as much more parking. The future of our unparalleled services for blind and visually impaired people, as well as community eye health and public awareness of vision issues, will require large commitments from donors and grantors to Miami Lighthouse.

Background

In August 2007, CEO Virginia A. Jacko presented a Concept Paper for a Miami Lighthouse Center of Excellence to the Board of Directors. Drawing on extensive research, the paper demonstrated the need for the expansion of services. The Board approved the concept and also expanded the Mission Statement of Miami Lighthouse to include eye wellness, education and research.

As expected, the numbers of blind and visually impaired people who need Miami Lighthouse services have continued to increase, and Miami Lighthouse continues to confront other issues detailed in the original concept paper. For example:

- Thousands of children in Miami-Dade County lack access to vision care, a problem we are helping to solve through our Heiken Program. Vision problems in children and teenagers may contribute to poor school performance, behavior issues and delinquency, according to research by Joel N. Zaba, O.D.: “Undetected and untreated vision problems can lead to poor academic performance in school, self-esteem issues with attendant emotional components, and, when triggered by other factors, antisocial behavior.”¹ Adults at the lowest levels of literacy often are found to have significant undetected and untreated vision problems.²
- Ninety percent of blind children are Braille-illiterate, and blind children frequently are not gaining proficiency in other school-readiness skills. According the American Printing House for the Blind, there are approximately 57,696 legally blind children in the U.S.³ Out of those school-age children, only 10 percent use Braille as their primary reading medium.⁴ Braille instruction at Miami Lighthouse is crucial, as only 15 Teachers of the Visually Impaired (TVI) must rotate among almost 400 public schools in Miami-Dade County.
- Our Blind Babies program has almost doubled in size to meet a growing need. Many more premature infants survive than in the past; among those born at 20-24 weeks, 48 percent have severe disabilities, and blindness is among the most common. Retinopathy of prematurity is a common blinding disease in children and is becoming increasingly prevalent.⁵

- Miami-Dade County has a large population of people over 65, and approximately one person in three has some form of vision-reducing eye disease by that age.⁶ Eighty percent of blind people are over the age of 50. Age-related macular degeneration (AMD) is the most common cause of blindness, with as many as two-thirds of people over 80 showing signs of AMD,⁷ but other causes include diabetes and glaucoma. Diabetes and pre-diabetes sufferers account for approximately 35 percent of our current adult clients at Miami Lighthouse. Often diabetic conditions are diagnosed late and under-treated in minority populations such as we serve. The prevalence and delayed diagnosis of diabetic retinopathy in people of African, Haitian, and Hispanic descent was noted in 2004 by The Eye Diseases Prevalence Research Group.⁸
- The incidence of visual impairment is higher in the under-served minority populations who rely on Miami Lighthouse as their only resource for vision care. A team of Bascom Palmer physicians recently found that several minority populations have high rates of visual impairment.⁹
- A serious nationwide shortage of trained vision rehabilitation professionals continues.¹⁰

The Miami Lighthouse Center of Excellence in 2010

Progress on the five-year plan established in 2008 for the five Center of Excellence components has been steady and impressive, while further funding is necessary in several areas. In addition, initiatives that have expanded on or before schedule, including year-round programming for children, the Florida Heiken program, music, and low vision require ongoing funding. A plan is in development to address the future growth of all of these initiatives when the term of the five-year plan expires in 2012.

1. Mobile Outreach. Since the 2007 merger with the Dr. Bruce Heiken Memorial Fund, we have helped nearly 17,000 schoolchildren from low-income families with optometric exams, with about 75 percent receiving prescriptions for free eyeglasses. A third mobile eye care unit was purchased in 2008 with funding from a private donor. In November 2010, the Miami Lighthouse Florida Heiken Program expanded mobile outreach beyond Miami-Dade County into Broward and Hillsborough. This is the initial expansion; eventually \$500,000 in funding for the program from the Florida Department of Health will be used to serve schoolchildren in all 67 Florida counties.

Planned mobile outreach to senior citizens has been delayed due to lack of funding. Visually impaired senior citizens often cannot travel to receive low vision care, including low vision examinations and rehabilitation, and demonstration of vision aids such as magnifiers and correct lighting. Our 2010 adult mobile outreach feasibility test determined that mobile outreach to seniors would be an effective way of reaching a target client population that includes many non-drivers and ALF residents, and may include a fee-for-service component in some cases to enhance sustainability.

2. Low Vision Clinic. Low vision is a visual impairment not correctable by standard eyeglasses, contact lenses, medicine, or surgery that interferes with a person's ability to perform everyday activities. In 2010 Miami Lighthouse re-opened a completely renovated Low Vision Clinic on the first floor, as well as relocating its Solutions Store. Our Consulting Optometrist, Rosemary Gonzalez, O.D., oversees a range of Low Vision Services, including comprehensive Low Vision assessments followed by appropriate services, such as adaptive reading techniques, Orientation & Mobility training, safety and organizational skills, and training in the use of assistive technology. In-home services by an occupational therapist (OT), a component of Low Vision outreach, also was launched in 2010. The OT helps people with low vision make modifications in their homes, such as lighting, tactile markings, assistive devices and other recommendations from referring physicians to increase safety and independence.

3. Assistive Technology Center. The Miami Lighthouse Assistive Technology Center initiative had a soft launch in 2010. A incentive matching gift from a private donor established a special fund, the Educational Empowerment Fund for Braille and Technology Literacy. The Educational Empowerment Fund will help us increase Braille instruction hours and purchase better equipment. Further grant funding for Braille and technology literacy is being pursued; proposals submitted to grantors in 2010 for Braille literacy, have been funded.

With Florida Division of Blind Services funding from the American Recovery and Reinvestment Act of 2010, Miami Lighthouse added a Job Readiness component to its existing vocational rehabilitation instruction in 2010. Through the Job Readiness program 25 blind and visually impaired clients so far have received instruction in computer skills, résumé preparation, job search and interview skills. Already, approximately half of the participants have obtained full-time positions with local employers, including the Marriott World Reservations Call Center.

Technology levels the playing field for blind and visually impaired people and is a major component of independent living and career success. For example, participants in our Better Chance Music Production Program TM use computer hardware and software that enables blind people to arrange and compose music, leading to mainstream employment in a challenging and rewarding field. New methods are constantly being developed to help the blind and low vision populations with assistive devices and accessibility enhancements.

Miami Lighthouse plans to be at the forefront in the testing and implementation of the most advanced technology for our clients. A state-of-the-art Assistive Technology Center will provide innovative technology training for users and the professionals who serve them. In addition, we will be able to conduct more pilot projects for adaptive technology that can benefit blind and visually impaired children and help adults maintain their independence and, in many cases, assist with job readiness skills.

4. Living Laboratories. Miami Lighthouse has increased its collaborations with universities that offer programs in vision rehabilitation and related fields, and has hosted several interns.

Our proposed Living Laboratories will provide a new venue to educate more vision rehabilitation and education professionals through building on current collaborations with universities, with internships, research, and curricula for vision-related professions. Miami Lighthouse has become a vision rehabilitation practicum site, hosting interns from vision rehabilitation programs at Florida State University, Barry University, University of Arkansas, Stephen F. Austin State University, University of Massachusetts, and University of Pittsburgh. In 2010 Miami Lighthouse acquired local housing for hosting interns.

Miami Lighthouse provides Continuing Education Units (CEUs) for professionals through our collaborations with academe, including workshops for nurses, physical therapists, occupational therapists, and Dade County Optometric Association members. BPEI ophthalmology residents are on rotation here each Wednesday. We also continue to host Teacher Training Days for Miami-Dade County Public Schools Teachers of the Visually Impaired (TVI).

5. Children's Services. In 2008, Miami Lighthouse expanded its Children's Services (birth to age 22) by 33 percent, adding instruction on Saturdays and teacher workdays to increase proficiency in Braille and technology as well as life and study skills to our growing number of young clients. In 2009 we launched year-round Braille and critical skills instruction for children. Summer programs offered inclusion with sighted siblings and a hot lunch for the children; we served 200 lunches every weekday. Our Braille and technology programs for children and pre-Braille instruction for toddlers have expanded significantly. These programs also provide practicum experience and on-site teacher-training days for Teachers of the Visually Impaired (TVI). In 2008 our Blind Babies program had 40 participants; in 2010 it had almost 100 participants.

The Miami Lighthouse Music Production Program continues to produce original CDs by student performers, student composers and student sound producers. The program has become a national model for music instruction of blind and visually impaired students, which leads to mainstream employment opportunities. An inclusion component of the music program has enabled Miami Lighthouse clients and numerous sighted students to work together making music. The program was featured in an article in the peer-reviewed *Journal of Vision Impairment and Blindness* (Sept./Oct. 2010)

Center of Excellence Goals 2008-2012: Execution Update

Year 1 Initiatives (2008)

Purchase third mobile eye care unit for children's eye exams: COMPLETED 2008
Expand summer programming for children by at least 33 percent COMPLETED 2008
Launch professional training component COMPLETED 2008

Year 2 Initiatives (2009)

Begin year-round Braille and critical skills instruction for children LAUNCHED 2009
Create state-of-the-art Assistive Technology Center LAUNCHED 2010
Purchase one mobile vision unit to expand vision rehabilitation program for adults
PURCHASED 2012

Year 3 Initiatives (2010)

Create a preeminent Low Vision Center COMPLETED 2010, UPGRADED 2012
Provide housing for interns COMPLETED 2010
In year three, three grants were submitted to fund pre-Braille and technology literacy starting in year four.

Year 4 Initiatives (2011)

Initiate Living Laboratory for research and training LAUNCHED 2009
Expand Braille and technology literacy to families and pre-Braille for toddlers
LAUNCHED 2009; EXPANDED 2011

Year 5 Initiatives (2012)

Living laboratories were expanded to adult day care
Add fourth floor to house the **Sash A. Spencer Educational Empowerment Center** (\$2.2 million campaign) which will include a Braille homeroom, technology laboratory and transition student suite. CAMPAIGN, PLANS AND SPECS COMPLETED, CONSTRUCTION BEGINS 2013
FUNDING NEEDS are imminent for the music program, Social Group Activities, Job Readiness Training, Instructional Technology, Braille Literacy and other programs for blind and visually impaired children and adults.

References:

- ¹ Johnson, R.A. and Zaba, J.N. "The visual screening of adjudicated adolescents." *Journal of Behavioral Optometry*. 1999; 10:13–17.
- ² Thau, A.P. "Vision and literacy." *Journal of Reading*. Nov. 1991; 33:196–199.
- ³ American Printing House for the Blind, 2008 Annual Report.
- ⁴ "Facts and Figures on Americans with Vision Loss." American Foundation for the Blind, <http://www.afb.org/Section.asp?SectionID=15&DocumentID=4398>.
- ⁵ Chen, Jing and Lois E. H. Smith, "Retinopathy of prematurity." *Angiogenesis* 10 (22): 133-140.
- ⁶ Quillen, David A., M.D "Common Causes of Vision Loss in Elderly Patients." *American Family Physician*, July 1999.
- ⁷ "Blindness in the Elderly" *The Lancet*, Oct. 2008, 372 (9646): 1273.
- ⁸ The Eye Diseases Prevalence Research Group, "Causes and Prevalence of Visual Impairment Among Adults in the United States." *Archives of Ophthalmology*, 122:552-563.
- ⁹ Lam, B.L., Lee, D.J., Zheng, D.D., Davila, E.P., Christ, S.L., Arheart, K.L. "Disparity in prevalence of self-reported visual impairment in older adults among U.S. race-ethnic subgroups." *Ophthalmic Epidemiology*. 2009 May-Jun; 16 (3):144-50.
- ¹⁰ Rogers, P. and Orr, A.L. "Current issues and future directions in the field of aging and vision" in Silverstone, Lang, Rosenthal and Faye (eds.), *The Lighthouse Handbook on Vision Impairment and Vision Rehabilitation*. Vol. 2: Vision Rehabilitation (1315-30). New York: Oxford University Press; 2000.

“This [Miami Lighthouse Center of Excellence] is a truly brilliant idea. And, from the arguments you make and the data you provide, it leaves me, the reader, with little doubt that this is an idea whose time has arrived and the Lighthouse is well positioned to deliver on the promise of this concept.”

William B. Werther, Jr., Ph.D.

*Professor of Management and Co-Director of the Center for Nonprofit Management,
University of Miami.*

“Virginia, you and your enthusiastic staff have a way of making one think well beyond what has been done in other locations and realize the possibilities are only limited by our imagination. I have every reason to believe you will be able to make Miami Lighthouse the Mayo Clinic of the visually challenged.”

Thomas I. Porter, OD, FAAO

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American Academy of Ophthalmology Low Vision Diplomat*

MIAMI LIGHTHOUSE MISSION STATEMENT

*To provide vision rehabilitation
and eye health services
that promote independence,
to educate professionals,
and to conduct research in related fields.*

*For more information about
the Miami Lighthouse Center of Excellence
in Vision Rehabilitation and Low Vision Services contact:*

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