



# Vision + Health

## Hospitalized Patients With Vision Loss May Need Greater Resources

Alan R. Morse, JD, PhD, President and CEO of Lighthouse Guild, presented the findings of the study entitled “The Impact of Vision Loss on Length of Stay, Readmission and Cost of Inpatient Hospitalization” at the 2016 annual meeting of the Association for Research in Vision and Ophthalmology (ARVO). “Hospitals need to develop plans to assist patients with blindness or low vision, as well as their families and caregivers before, during and after hospitalization,” Dr. Morse said. “Focusing on the needs of patients with vision loss will lower costs and lead to improved patient outcomes.”

Co-authors of the study were Paul P. Lee, MD, JD, Prof., Chair of the Dept. of Ophthalmology and Visual Sciences, Director of the W.K. Kellogg Eye Center, Univ. of Michigan; William H. Seiple, PhD, VP of Research and Director of the Arlene R. Gordon Research Institute at Lighthouse Guild, Prof. of Ophthalmology at NYU School of Medicine; Joshua D. Stein, MD, MS, Dept. of Ophthalmology and Visual Sciences and Institute of Healthcare Policy and Innovation at the Univ. of Michigan; and Nidhi Talwar, MA, Dept. of Ophthalmology and Visual Sciences at the Univ. of Michigan.

Patients with impaired vision who are admitted to the hospital for certain common disorders spend more time in the hospital and more money on resources after discharge, including emergency department visits, than patients who are not visually impaired. A national study found that a diagnosis of vision loss



*A patient with impaired vision spends more time in the hospital and more money on resources.*

results in above-average use of health care resources. Findings from the study are important, both for the multiple billions of dollars that could be saved within the Medicare system alone, and for highlighting areas where planning might reduce use of resources and improve patient care.

### A Focus on Eight Common Diagnoses

The study analyzed information from the Clinformatics for Managed Care claims database

from 2001 to 2014, which included data from about 18.5 million patients. The study matched nearly 6,000 patients diagnosed with vision loss before hospitalization with a comparable number of patients with similar inclusion criteria who had no record of vision loss. The analysis focused on patients admitted for eight common diagnoses: chronic obstructive pulmonary disease, pneumonia, heart failure, digestive disorder, major joint replacement, renal failure, urinary tract infection and sepsis.

### Medication Info in Large Print or Braille

“Hospitalization is stressful for patients and families. For patients with vision loss, measures such as making sure discharge and medication instructions are in large print or Braille and reviewing how patients will be able to identify their medications following hospitalization can make a difference,” Dr. Morse said. “It is also important that their caregivers—in and out of the hospital—understand the consequences of vision loss on care needs.” ■

## Early Parkinson's Disease and Retinal Structure

"Ophthalmologic Baseline Characteristics and 2-Year Ophthalmologic Safety Profile of Pramipexole IR Compared with Ropinirole IR in Patients with Early Parkinson's Disease", *Parkinson's Disease*, 2016, Article ID 8298502, 1-14. William H. Seiple, Dana Jennings, Richard B. Rosen, Leona Borchert, Lee Canale, Nora Fagan, and Mark Forrest Gordon.

Parkinson's disease (PD) progressively affects cortical dopaminergic neurotransmission, and loss of dopamine may affect retinal dopaminergic functions. We explored whether patients with early Parkinson's disease exhibit changes in retinal structure or function. Comprehensive ophthalmologic assessments, including corrected acuity, Roth 28-color test, slit-lamp biomicroscopy, intraocular pressure, computerized visual field test, fundus photography, and electroretinography were conducted on 246 patients with early PD. We found that, at baseline, most retinal measures were within normal limits. The new finding of our work was that retinal pigmentary epithelium hypopigmentation was observed at a much higher frequency in PD patients than in control subjects. This finding suggests that dopamine deficit has early effects on outer retinal structure, in addition to its cortical neurotransmission effects. Future work will determine whether changes in retinal structure could be used as early detectors of disease.

## Behavioral Health Programs Offer Unique, Vital Expertise

Any listing of the effects of blindness or vision loss necessarily includes psychological stress. Lighthouse Guild's Behavioral Health Program addresses the needs of those with visual impairment who also have mental health conditions or concerns by offering a unique clinic and day treatment program.

The Behavioral Health Program began in 1961, and after more than half a century remains the only program of its kind in the country.

Services include psychotherapy, psychiatry and psychopharmacology, psychological and neuropsychological evaluation, clinical social work and creative arts therapy. The program is strengthened by on-site specialists in optometry, endocrinology, neurology and psychiatry, with whom behavioral health care is coordinated. Couples, family and group psychotherapy also are offered, as is a 24-hour crisis hotline.

### Loss of Vision Can Lead to Psychological Stress

"The psychological effects of vision loss can be overwhelming and different for each individual," said Goldie Dersh, PhD, Vice President of Lighthouse Guild's Behavioral Health Services. "Depending on the cause of the loss of vision, emotional stress can lead to psychosocial problems that can make daily life increasingly difficult and challenging. Our goal is to help people lead fulfilling, independent and productive lives."

Those with vision impairment often have other significant comorbidities, such as traumatic brain injury, stroke, diabetes, cancer, glaucoma or macular degeneration, among others. Coexisting with these are the ever-changing psychological strains from work, family and social relationships. All of these psychological stressors together can present significant challenges that can impede daily functioning and increase emergency room visits, as well as medical and psychiatric hospitalizations.

### A Unique Program

Access to expert psychological medical care for those with vision impairment is vital, but the combination of ready behavioral health expertise and deep understanding of the needs of those with vision impairments exists virtually nowhere else.

"There is still a stigma attached to acknowledging the need for mental health services," said Alan R. Morse, JD, PhD, President and CEO of Lighthouse Guild. "We want people with visual impairment who are dealing with mental health issues to get to know that our Behavioral Health Program is here to help them."

The Behavioral Health Program treats about 500 patients annually. The program is licensed by the New York State Office of Mental Health, and accepts Medicare, Medicaid and many insurance plans. Facilities include the Upper West Side of Manhattan campus and the Midwood section of Brooklyn. ■

## Lighthouse Guild Favors Speed Cameras and Safe Travel

Lighthouse Guild raises awareness of the needs of those with vision impairment, advocates for access to vision rehabilitation services and advances for legislation that helps those affected by vision loss.

### Other local advocacy activities in 2016 have included:

- Lighthouse Guild participated in the Disability Pride NYC Parade, helping raise awareness about issues of accessibility and inclusion for people with disabilities.
- In concert with other organizations meeting at New York City Hall, Lighthouse Guild supported the Every School Speed Safety Camera Act (Assembly Bill 9861). Over 1 million students, including those with disabilities, are put in danger by reckless driving in New York City. Speed enforcement cameras positioned in school zones can help slow down speeding cars and ensure the safety of children with vision loss as they go from the school bus to the school door.
- The Accessible Pedestrian Signal Coalition of Westchester held its second annual street-crossing event, "The Blindfold Challenge." The event helps raise awareness of the challenge that streets can present for those who are visually impaired.
- As part of Lighthouse Guild's Travel Safety Program, Operation Safe Travel has been conducting a series of meetings throughout New York City and the Lower Hudson Valley. The program works to improve travel indepen-



*Laurie Rubin and her guide dog at an accessible crossing.*

dence with information on techniques and skills needed to travel safely. Operation Safe Travel consists of small group meetings that are workshops run by orientation and mobility staff; community awareness meetings, which will include tips and route planning advice; and one-on-one training, which will assess skills and provide corrective instruction. ■

## STANFORD AND JOHNS HOPKINS RESEARCHERS RECEIVE VISION SCIENCE AWARDS

Lighthouse Guild annually acknowledges the accomplishments of distinguished vision science researchers. Daniel Palanker, PhD, is the 2016 recipient of the Bressler Prize, which recognizes a midcareer clinician or scientist whose work has led to important advancements in vision science. The winner of the Pisart Award, given to an early-career clinician or scientist whose work shows great promise, is Pradeep Y. Ramulu, MD, PhD.

Dr. Palanker uses his training as a physicist to create optical and electronic technologies with diagnostic, therapeutic, surgical and prosthetic uses, primarily with applications in ophthalmology. Dr. Palanker is Professor of Ophthalmology and Director of Research in the Department of Ophthalmology at Stanford University School of Medicine, California, and a faculty member

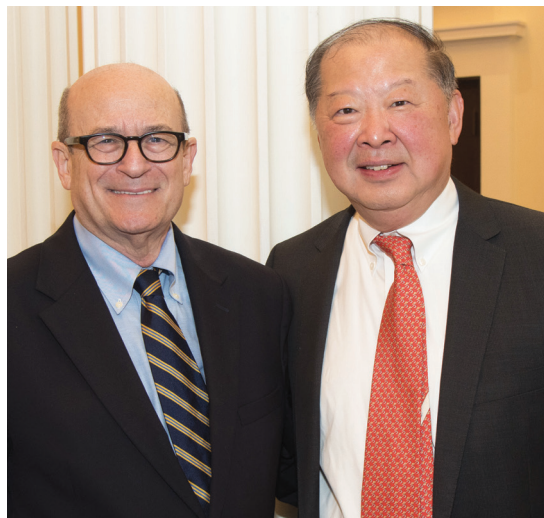
of the Hansen Experimental Physics Laboratory at Stanford. He is also a member of Bio-X, Stanford's interdisciplinary biosciences institute, and the Stanford Neurosciences Institute.

He is the director of a multidisciplinary research program on electro-neural interfaces that has explored photovoltaic retinal implants that are thin, wireless and modular, thus permitting easier implantation. This work on a high-resolution retinal prosthesis may restore vision to patients with retinitis pigmentosa and age-related macular degeneration. He has also explored the electronic control of vasculature and the lacrimal gland for treatment of dry eye syndrome.

Dr. Palanker's research on laser interactions with retinal cells revealed the tissue response mechanisms behind

## Recognizing Scientific Achievement

We recently held our annual Bressler Symposium and Pisart Lecture at the New York Historical Society. The Symposium and Lecture were preceded by a special Pre-conference sponsored by Columbia University Department of Ophthalmology and Lighthouse Guild on "New Technologies for the Patient with Vision Loss". The conference was aimed at the vision care community and speakers presented about evolving technologies that directly benefit patients with vision loss, as well as new directions for expanding technology development for the growing numbers of people with vision loss.



*Lighthouse Guild's President & CEO Alan R. Morse, JD, PhD (left), Stanley Chang, MD, of Columbia University Department of Ophthalmology.*



*Pradeep Ramulu, MD, PhD, winner of the 2016 Pisart Award, presented "Functional and Behavioral Implications of Low Vision".*

cellular repair after laser therapy, which eventually led to the development of non-damaging retinal laser therapy for the macula. Several of Dr. Palanker's discoveries have led to products that are now regularly used in clinical practice around the world.

Dr. Ramulu is Associate Professor of Ophthalmology at Johns Hopkins University School of Medicine, in Baltimore. His research has examined the effects of vision loss on quality of life from a variety of conditions, such as age-related macular degeneration, severe dry eye disease, diabetes, cataracts and glaucoma. His intent is to better understand the many factors that mediate disability.

Dr. Ramulu uses metrics to measure the effect of vision loss on quality of life. For instance, he designed

a quantitative reading test that is based on an actual book read under observation and scored accordingly. The test showed that patients with glaucoma had a significantly slower reading speed over a 25-minute period. As a clinician focused on glaucoma, Dr. Ramulu is also researching the genetic basis behind angle-closure glaucoma to identify possible treatments.

"Improving the lives of people who are blind or visually impaired is a core tenet of Lighthouse Guild's mission," added Alan R. Morse, JD, PhD, President and CEO of Lighthouse Guild. "By recognizing leading clinicians and researchers, we bring new energy to our shared purpose and help lay the foundation for tomorrow's breakthroughs. We look forward to seeing their future work and to working with them to help people with vision loss." ■



The Bressler Symposium's 2016 theme was "Technologies for Restoration of Sight in Retinal Degeneration".

The speakers and their topics: **E.J. Chichilnisky, PhD**, Stanford University, presented "Towards Prosthetic Restoration of the Natural Visual Code"; **Botond Roska, MD, PhD**, University of Basel, Switzerland, presented "Optogenetics for Restoration of Sight"; **Daniel Palanker, PhD**, Stanford University, 2016 Bressler Prize winner, presented "Characteristics of Prosthetic Vision with Subretinal Implants"; **Richard H. Kramer, PhD**, University of California, Berkeley, presented "Photoswitch Chemicals as Drug Candidates for Restoring Sight"; **Thomas A. Reh, PhD**, University of Washington, presented "Reprogramming Cells to Treat Retinal Degeneration"; **James D. Weiland, PhD**, University of Southern California, presented "Epiretinal Prostheses: Mechanisms and Clinical Results".

## Scholarships Recognize Exceptional Students Pursuing Their Dreams

Lighthouse Guild provides scholarships every year to exceptional college-bound high school students and graduate students who are legally blind.

“At Lighthouse Guild, we believe that when you provide people with the right tools and support, there is no limit to what they can achieve,”

said Alan R. Morse, JD, PhD, President and CEO of Lighthouse Guild.

### A Role Model for Her Peers

The accomplishments by the 15 college-bound 2016 scholarship winners, who each received about \$10,000, are indeed inspiring. As an example, Emely Recinos, who has just begun attending New York University, is the recipient of the Judy Van Nostrand Arts Award for excellence in music. She attended Lighthouse Guild’s Filomen M. D’Agostino Greenberg Music School. The scholarship will allow Ms. Recinos to study law and “work for equality and equal protections for people with disabilities,” she said.

“Emely is a remarkable young woman who is making it her mission to give back,” said Gordon Rovins, Director of Special Programs at Lighthouse Guild. “Rather than let blindness hold her back, she’s been a role model for her peers, her family and for all of us.”

### An Exemplar of Achievement

Jameyanne Fuller is a Fulbright Scholar who has been admitted to Harvard Law School. The



*Emely Recinos*



*Jameyanne Fuller*

\$5,000 scholarship for graduate work is one of a few presented each year by Lighthouse Guild.

Ms. Fuller’s life has been an exemplar of achievement. She achieved a perfect 800 on her math SATs, used Braille to graduate from Kenyon College with the highest academic

honors, scaled an Andean mountain, lived and worked independently as a teacher in Italy under a Fulbright scholarship, and has written not one but two novels. Along the way she has enlightened those around her about what someone with a disability can achieve. She plans to focus on “the policy and implementation of rights of people with disabilities.”

“We have been able to give more than 150 scholarships over the last 10 years to students who are blind, and who have excelled in their studies and shown great promise for the future,” Dr. Morse said. “It is gratifying to know that we are helping students with vision loss achieve their dreams.”

Those dreams will take the 15 recipients of Lighthouse Guild Scholarships, who come from all over the United States, to some of the most prestigious universities. In addition, the other recipient of Lighthouse Guild Graduate Scholarship is starting studies at Yale University.

“More often than not, we see these young men and women turn disabilities into inspiring stories of human triumph,” Mr. Rovins added. ■

## Lighthouse Guild Staff News

President and CEO **Alan R. Morse, JD, PhD**, has been appointed to the Vision Rehabilitation Committee of the American Academy of Ophthalmology.

Dr. Morse recently authored with John E. Crews, Chiu-Fang Chou, Matthew M. Zack, Xinzhi Zhang, Kai McKeever Bullard and Jinan B. Saaddine. (2016). "The Association of Health-Related Quality of Life with Severity of Visual Impairment among People Aged 40-64 Years: Findings from the 2006-2010 Behavioral Risk Factor Surveillance System." *Ophthalmic Epidemiology*, 9, 23(3):145-53.

Dr. Morse also recently authored (2016). "Death (and Taxes) May Be Certain. Is Vision Loss?", *Journal of Visual Impairment and Blindness*, Nov-Dec: 474-77.

Dr. Morse and **William H. Seiple, PhD**, Vice President of Research and Director of the Arlene R. Gordon Research Institute presented, with Paul P. Lee, Nidhi Talwar and Joshua D. Stein, "The Impact of Vision Loss on Length of Stay, Readmission and Cost of Inpatient Hospitalization" at ARVO 2016. They also presented, with Olga Overbury, J. Vernon Odom and Tiffany Arango, "Light, What Is It Good For?"

COO **Mark G. Ackermann** has been appointed Chair, Board of Directors, VisionServe Alliance. VisionServe Alliance is a consortium of Executive Directors and CEOs of 501(c)(3) nonprofit organizations throughout the United States that provide unique and specialized services to people who are blind or have severe vision loss. As the leading trade organization for vision-related organizations, VisionServe Alliance's mission is to engage leaders in building a better world through services for people with vision loss.

**Judy Farrell**, GuildNet VP, Government Affairs, moderated a panel discussion at the GuildNet co-sponsored Hudson Valley Access to Health Care Coalition's Annual Legislative Breakfast at New York Medical College, on "New York's Health Care Delivery System Reform".

Director of Low Vision Services, **Laura Sperazza, OD**, presented "Technology and the Low Vision Patient" at Bascom Palmer Eye Institute's XXXVIII Inter-American Course in Clinical Ophthalmology. Close to 200 practicing ophthalmologists from Latin America and the Caribbean attended Dr. Sperazza's presentation.

**Premila Kumar**, GuildNet AVP for Population Health Management, presented on Telehealth at the Association for Community Affiliated Plans (ACAP) 2016 Spring Medicare & MLTC Meeting.

Director of Children's Vision Programs **Linda Gerra, EdD**, and Occupational Therapist **Yu-Pin Hsu** presented "Meeting the Needs of Children with Vision Loss"; Occupational Therapist **Inna Babaeva** and Yu-Pin Hsu presented "Post-Telescope Implant Visual Rehabilitation for Clients with AMD" at the American Occupational Therapy Association's annual conference.

**Stefanie Know**, Supervisor QAPI, **Laura Brosen**, Medicare QAPI Specialist and **Mike McHugh**, Director CM, presented The Standard "Transitions of Care" at the NCQA conference in Washington, DC. The NCQA (The National Committee for Quality Assurance), chose GuildNet to participate in a pilot study to review accreditation standards for MLTC (long term services).

GuildNet Social Work Supervisor **Jane Kramer** and Nurse Case Manager **Eva O'Brien** spoke on "Collaboration between Hospice and Managed Care" at the annual conference of the Hospice and Palliative Care Association of New York State.

GuildNet Nutrition Manager **Janaki Sengupta**, GuildNet Director of Marketing **Joselyn Salazar**, and Director of Outreach **Janet Weinstein**, presented on Diabetes Care to the patients of ophthalmologist Olive Osborne, MD, in the Bronx.

**Elise Grossman**, Manager, Rehabilitation Services, presented on Traumatic Brain Injury and Vision Loss at the Vision Employment Institute Conference in Albany. ■

## Lighthouse Guild

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### Lighthouse Guild's International Collaboration with the RNIB



*Two teens with vision impairment, who took part in a discussion with their peers from the RNIB. (Thanks to our Board Chair James M. Dubin for arranging for the use of the studio with Emmis Communications.)*

Lighthouse Guild has joined with the Royal National Institute of Blind People (RNIB), based in London, to collaborate on a project to promote discussion about vision impairment. Both groups will establish a joint online panel discussion comprised of three panelists from each organization. The ensuing conversation will create a short, 10-minute "discussion starter" which, broadcast over social media, will encourage feedback and commentary. This feedback will then be collected into a one-hour program online.

Mark G. Ackermann, Executive Vice President and Chief Operating Officer of Lighthouse Guild, said, "People of all ages who are blind or visually impaired can often feel voiceless in a world that is designed for those who are

sighted. This international collaboration will not only help make their voices heard, but will offer them the opportunity to share experiences, empower each other, and educate all of us."