

FY 2017 REPORT TO DONORS

July 1, 2016 - June 30, 2017

Ten years ago, Hoag's Neurosciences Institute was just an idea held by a few forward-thinking leaders. They set out to create a comprehensive, collaborative and integrated institute that facilitates and coordinates a portfolio of programs, each focusing on a specific clinical condition. These programs are delivered through multispecialty teams, sharing overlapping resources. Each program measures their outcomes and value to the patient; all have the mission of striving to offer the best care available anywhere.

PROMISE

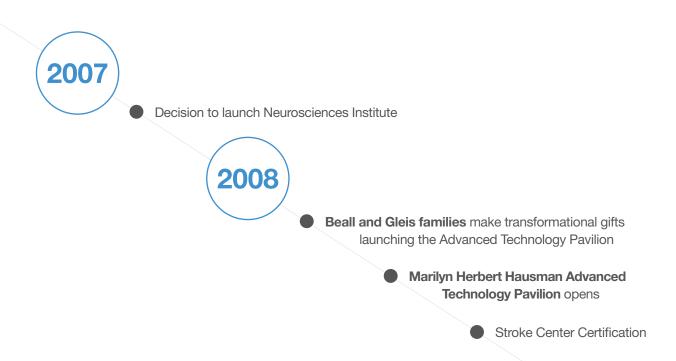
OUR CAMPAIGN TO LEAD, INNOVATE & TRANSFORM

Visionary donors have embraced the mission of Hoag's Neurosciences Institute and we have significant success to show for it. This report is a summary of the impact that you made with your support in fiscal year 2017 (July 1, 2016 – June 30, 2017).

10 Years in the Making

Neurosciences Institute Milestones

Philanthropy has been a central plank in the growth and development of the Neurosciences Institute. The following are just a few of the highlights of the progress and impact over the past decade.





- Opening of Neurosciences
 Institute's outpatient platform
 and Conference Center
- Launch of multiple sclerosis service
- Launch of inpatient pain service
- Created comprehensive OC Stroke Center Network with the county, UCI and St. Joseph Hospital
- Received **UniHealth** grant and launched Orange County Vital Brain Aging Program
- Received first National Institute of Health sponsored trial for stroke

2011

- Opened the Judy & Richard Voltmer Sleep Center
 - Launched comprehensive Neurosurgery Back Pain and Spine Program
 - Opened inpatient Advanced Brain and Stroke Unit

2012

- Expansion of Chemical Dependency services to Irvine
 - Launched Neurospecialty Clinic at Hoag
 Health Center Newport Beach
 - Expanded Movement
 Disorders Program

Dr. Michael Brant-Zawadzki named Ron & Sandi Simon Executive Medical Director Endowed Chair of Neurosciences Institute

- Dr. William R. Shankle named the Judy & Richard Voltmer Endowed Chair in Memory and Cognitive Disorders
- Launched Headache Program

2014

- Used philanthropic support to recruit key program directors including epileptologist, pituitary tumor and minimally invasive spine surgeons
- Launched Skull Base and Pituitary Tumor Program
- Designated as one of six national sites for the NFL Players Association Brain and Body Program

2016/2017

- Started construction on the Fudge Family Acute Rehabilitation Center
 - Designated Level 3 Epilepsy Program
 - Expanded Neurosciences Institute to Hoag Health Center Irvine
 - Opened Hoag Sleep Center Irvine
 - Received Comprehensive Stroke Certification (Newport) and Primary Stroke Certification (Irvine)
 - Deployed neurosurgery
 augmented reality
 3D Surgical Theater

Filling a Gap in the Continuum of Care

Fudge Family Acute Rehabilitation Center

Until now, Hoag stroke patients have had to leave Hoag for continued residential post-acute rehab. The same is true for those with brain injuries and other conditions that require longer-term rehabilitation. Thanks to donor support, Hoag is changing that. With the help of significant support from **Gary Fudge**, Hoag started construction of the **Fudge Family Acute Rehabilitation Center**.

Last year, Hoag discharged over 400 patients to outlying acute rehabilitation centers with no Hoag oversight for a critical period of recovery. Soon patients will come to the Fudge Family Acute Rehabilitation Center, which is being constructed in unused clinical space on the third floor in the north tower of Hoag Hospital Newport Beach.

Opening in mid-2018, the new Fudge Family Acute Rehabilitation Center will feature residential post-acute care for patients after acute stroke, brain tumor surgery, intracranial bleeds, spine surgery, head trauma and other eligible conditions. It will provide neurological, orthopedic and traumatic brain injury patients with a streamlined and comprehensive continuum of care and oversight by their trusted Hoag physicians.



Program Updates



Hoag's Neurosciences Institute Addiction Treatment & Recovery

SolMar Recovery, a component of Hoag Addiction Treatment Centers (HATC) integrated within Hoag's Neurosciences Institute, opened two years ago thanks to significant philanthropy. Upon opening, five of the first female patients were over the age of sixty and insurance limitations and financial challenges prevented care for many.

Philanthropy from the **Marisla Foundation** provided scholarships for women to participate in recovery training activities, deepening their understanding of the disease of addiction and providing the tools and strategies needed for a sustainable recovery.

During fiscal year 2017, Hoag provided addiction treatment to 19 women in need. According to patient feedback, they felt welcomed, cared for and that someone understood what they were enduring. A Family Education Group was added every Wednesday night to help patients learn appropriate and healthy ways of coping with stress, improve communications and change behavior patterns.

New Leadership

Kambria Hittelman, PsyD, joined Hoag as the Director of Neurobehavioral Health at Hoag, including our Addiction Treatment Centers. Dr. Hittelman brings more than a decade of experience as a clinician, mental health and recovery program executive, overseeing programs and operations. She earned her PsyD in clinical psychology from the California School of Professional Psychology at Alliant International University in San Francisco following her undergraduate degree at UC Berkeley.

Orange County Vital Brain Aging Program

In its seventh year, the Orange County Vital Brain Aging Program (OCVBAP) continues to practice "Prevention Through Delay" in cognitive decline. In addition to collaborating with Hoag Family Cancer Institute and Hoag Orthopedic Institute, this year, the OCVBAP began working with the Melinda Hoag Smith Center for Healthy Living to address depression in seniors.

OCVBAP continues to provide access to expert clinicians and groundbreaking research in the field. It is now partnering with the Institute for Systems Biology, Providence St. Joseph Health's Research engine, on a cognitive population health model incorporating Scientific Wellness for prevention of cognitive decline.

OCVBAP also completed the development of continuing medical education online courses for physicians, available nationwide, on managing cognitive health in the aging population.

Impact in FY 2017:



5,224 In-Person Assessments



23% Impairment Rate



8,000Community Education Participants



24,000 Assessments at Physician Offices



4,533Self-Assessment Registrations



3,582Risk Factor
Assessment Users



2,310Depression
Self-Assessments



3,335Memory
Self-Assessments

Ted's Story: Halting the Progression of Alzheimer's Disease

The *Orange County Register* featured a story about Memory and Cognitive Disorders Program Director William R. Shankle, MD, **Judy & Richard Voltmer Endowed Chair** in Memory and Cognitive Disorders, and his patient Ted Esau. After following a program of monitoring, healthy eating, exercise and taking an FDA-approved medication, Mr. Esau is experiencing a halt in the progression of Alzheimer's Disease.

Despite strong family history, Mr. Esau has seen a reversal in his brain atrophy that was at 4.3% before treatment and is now back to a normal aging level of one percent. "I'll get Alzheimer's if I live long enough," he joked in the article, "but hopefully I'll live long enough to die of something else."

Thanks to *Orange County Register* reporter David Whiting's follow-up column, "Forgetfulness or Alzheimer's? A Simple Memory Test Can Help Ease Your Fears," calls from readers who wanted to take the assessment flooded OCVBAP. Thanks to philanthropy, the in-person memory screening fee is a nominal \$45. Since 2010, 4,500 individuals have taken the assessment. Through a dedicated outreach to primary care physicians, 25 percent of those individuals were referred to the program.

Hoag Affiliated Physician Reports an Edible Promise for Alzheimer's Disease

Physician researchers from Hoag's Neurosciences Institute's Memory and Cognitive Disorders Program have discovered that, for certain patients with a specific diagnosis, taking the "medical food" CerefolinNAC® for at least two years could help delay the effects of Alzheimer's Disease in the brains of patients according to a study published in the *Journal of Alzheimer's Disease*.

Health Care Navigation and Patient Advocacy Pilot

Thanks to support from Pei-yuan Chia and Kitty Shen, nurse navigators now have tools to streamline the process of follow-up care as well as collecting patient data that is mandatory for Hoag to retain its certification as a Comprehensive Stroke Center by DNV GL Healthcare USA, Inc. and the Orange County Emergency Medical Services Designation as a Stroke Receiving Hospital.

The completion of the Health Care Navigation and Patient Advocacy Pilot program gave nurse navigators a Stroke Navigator Dashboard to more efficiently track 1,000 stroke patients. Previously, they stored patient data among multiple Excel spreadsheets from which they had to manually extract information to meet certification standards and deliver the standard of care and follow-up.

"This system does a lot for us," said Victoria Thompson, data coordinator, Hoag Stroke Program. "From the moment a stroke patient is admitted in Newport Beach or Irvine, to the time they return home, the dashboard allows us to track their journey and ensure all follow-ups are performed on time."

A dedicated team of nurse navigators, IT specialists and senior leadership worked together to create a user-friendly, secure automated system that collects and stores detailed patient data, calendars and communications backed by intuitive software. Rather than hunting down binders or working with spreadsheets, nurse navigators have at their fingertips important work flows and timely reminders to keep each patient case progressing efficiently.

"We follow up with our patients after they go home in case they have medical complications," Victoria said. "We also monitor them for medicine compliance. We use it as an education opportunity to prevent them from having another stroke."



Sina Safahieh, MD, has joined Hoag to lead the ASPIRE clinical team. Dr. Safahieh, who is board certified in child and adolescent psychiatry, will provide the program's medical and clinical leadership, creating a unique partnership between Hoag and CHOC to meet this community need.



David Millett, MD, PhD, director of Hoag's Epilepsy Program, was honored by Hidden Truths Project and the Epilepsy Foundation of America for transforming epilepsy care in Orange County, Los Angeles and beyond.



Chris Duma, MD, director, Hoag Brain Tumor Program, is leading the latest vaccine trial for Glioblastoma Multiforme, the deadliest of all cancers. His leading-edge Gamma Knife approach to battling this disease has won national and international recognition through numerous presentations at scientific meetings and publications.





Robert G. Louis, MD, program director, Skull Base and Pituitary Tumor Program at Hoag, was featured in an ABC7 news story when he visited sixth graders at Davis Magnet School. He gave them a virtual reality tour of the brain using their phones and cardboard goggles. Dr. Louis is now participating in developing a training program for NASA astronauts.



Burak Ozgur, MD, chief of service, Hoag Neurosurgery Spine Program, was one of 22 physicians to receive a Spine Surgeon Leadership award from *Becker's Spine Review*. He was also named one of 340 Spine Surgeons to Know by *Becker's*.

Expanding Access to Hoag Neurosciences Institute

The expansion of Hoag's Neurosciences Institute (HNI) programs and services into Irvine gives South County residents more convenient access to HNI's patient-centered model that provides the best in evidence-based care. The following neurosciences specialty services are now available at Hoag Health Center Irvine – Sand Canyon:

- Neurosurgery Spine Program
- Brain Tumor Program
- Orange County Vital Brain Aging Program
- Headache Program
- Epilepsy Program
- Sleep Medicine



Awards & Accolades

Your support allows us to perform at levels that are recognized nationally as meeting the highest standards of excellence. We are proud to spread the good news about our recent honors.

- Hoag ranked High Performing in Neurology and Neurosurgery by U.S. News & World Report
- Hoag named one of the 100 Hospitals and Health Systems with Great Neurosurgery and Spine Programs for 2016
- Hoag received Get With The Guidelines®-Stroke Gold Plus Quality Achievement Award from the American Heart Association
- For the seventh year, Hoag received the Gold Plus Quality Achievement Award and, for the first year, the Target: Stroke Honor Roll-Elite acknowledged Hoag for its commitment to providing the highest standard of stroke care according to nationally recognized guidelines based on the latest scientific evidence

- Hoag Hospital Newport Beach was certified as a Comprehensive Stroke Center, making Hoag the second DNV GL certified hospital in California and the first hospital in Orange County to receive this accreditation
- Hoag Hospital Irvine was certified as a Primary Stroke Center by DNV GL Healthcare USA, Inc., affirming the hospital's readiness to handle a full range of stroke-related medical problems
- Hoag earned Level 3 Epilepsy Center
 Designation by the National Association of
 Epilepsy Centers (NAEC) for 2016-2017
- CareChex ranked Hoag the number three hospital in California for major neurological surgery
- Healthgrades recognized Hoag for superior outcomes in stroke treatment with the Stroke Care Excellence Award

Thank you

We offer our deepest appreciation to you for supporting leading-edge care in our community for 10 years and counting.

For more information, please contact Hoag Hospital Foundation at (949) 764-7217. Please visit our website: www.HoagPromise.org.