



INNOVATORS

HOAG INNOVATORS

# Philanthropic Leaders Catalyzing Innovation at Hoag

*“Hoag Innovators is forward-thinking and is contributing to a culture of innovation at Hoag, a way of thinking that guides all we do. Their giving is both generous and strategic – it positions our most talented physicians and clinical leaders to nimbly respond to opportunities, test novel and creative approaches to complex problems and, ultimately, transform the health care experience for patients in our community and beyond.”*

**Robert T. Braithwaite**  
President and Chief Executive Officer, Hoag

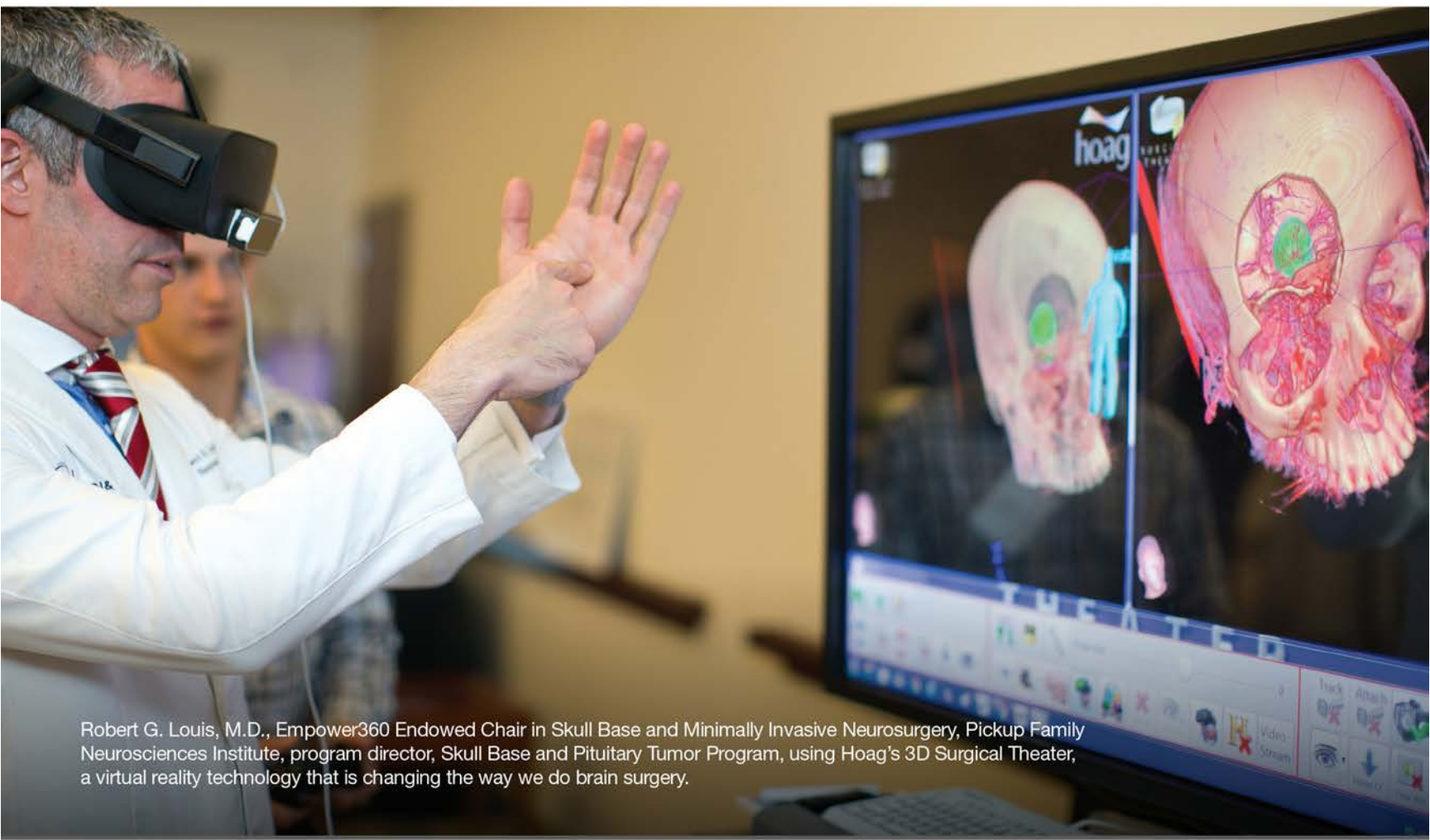
# Overview

## Hoag Innovators

The Hoag Innovators, founded and led by former Hoag Hospital Foundation Board Chair Robert Brunswick and his wife Kitty, is a group of philanthropists, entrepreneurs and community leaders who are leveraging the power of collective giving to move Hoag forward as a destination for world-class care.

### Hoag Innovators was created to . . .

1. **Activate a group of like-minded philanthropists** who share a vision for “investing” in health care innovation through support of Hoag.
2. **Take part in Hoag’s bold plan to develop the Hoag Clinic** and to be recognized in the same league as national institutes, such as the Mayo Clinic.
3. **Provide funds to support Hoag** in acquiring advanced technologies and implementing innovative services necessary to offer world-class health care right here in Orange County.
4. **Provide the opportunity to impact multiple Hoag institutes and centers** through pooled giving.
5. **Consult with and provide input** to the Hoag Hospital Foundation on allocation of funds based on Hoag’s greatest innovation needs.
6. **Enjoy building relationships with Hoag physicians** as they share their visions for bringing the latest advances in their fields to Hoag.
7. **Build knowledge about current and upcoming health care innovations** in a variety of specialties.
8. **Support Hoag in maintaining its status as a health care leader**, recognized in California and the nation for its top quality care and exceptional physicians and nurses.
9. **Target giving to innovation initiatives** to allow Hoag physicians and administrators to expand Hoag’s reach beyond the confines of its operating budget.
10. **Recognize the generosity of Hoag Innovators** with access to the Hoag Hospital Foundation Benefactor Program.



Robert G. Louis, M.D., Empower360 Endowed Chair in Skull Base and Minimally Invasive Neurosurgery, Pickup Family Neurosciences Institute, program director, Skull Base and Pituitary Tumor Program, using Hoag’s 3D Surgical Theater, a virtual reality technology that is changing the way we do brain surgery.





### The Hoag Innovators Platform

The Innovators gather twice a year to learn about the latest advancements in medicine from Hoag's leading physicians in a social setting and then recommend how best to allocate their pooled philanthropic gifts to catalyze innovation and advance Hoag.



### Contributions

To become part of Hoag Innovators, donors contribute \$250,000 or more to the Innovators Fund. This gift may be given over a period of five years and qualifies donors to access Hoag's Benefactor Program.

Additionally, irrevocable estate gifts of \$1,000,000 or more to the Innovators Endowment Fund qualify donors for participation in Hoag Innovators and Hoag's Benefactor Program. When realized, estate gifts will be pooled into the Innovators Endowment Fund, which will provide the enduring support needed to drive Hoag's leadership in health care innovation for years to come.

### Criteria for Innovators Investments

The Hoag Innovators Fund advances innovation in the following areas:



People and Programs

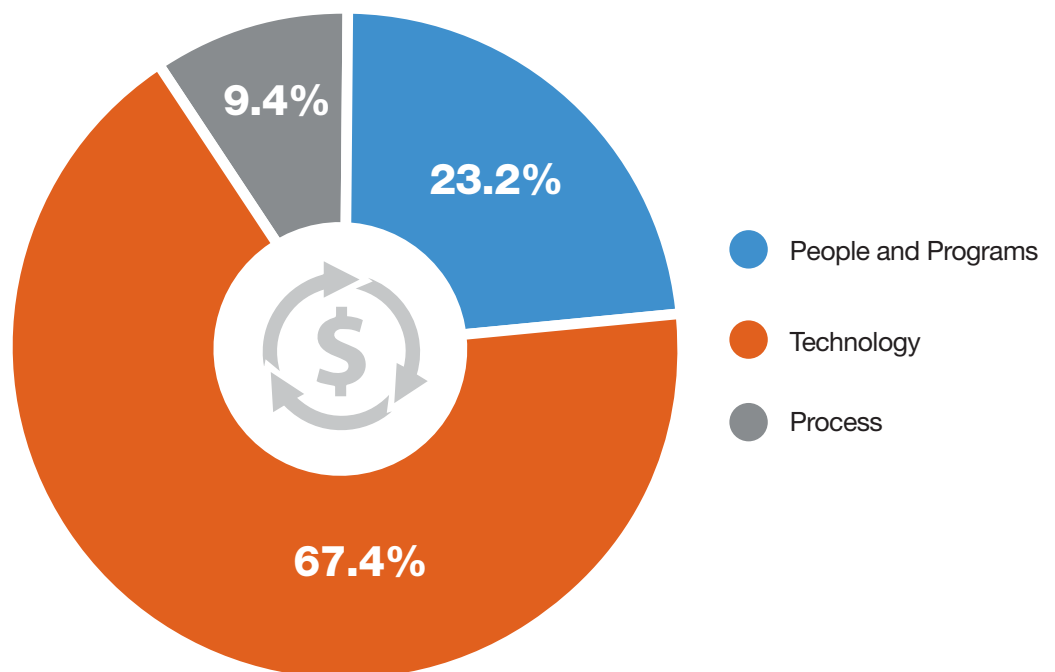


Technology



Process

Investment Distribution to Date

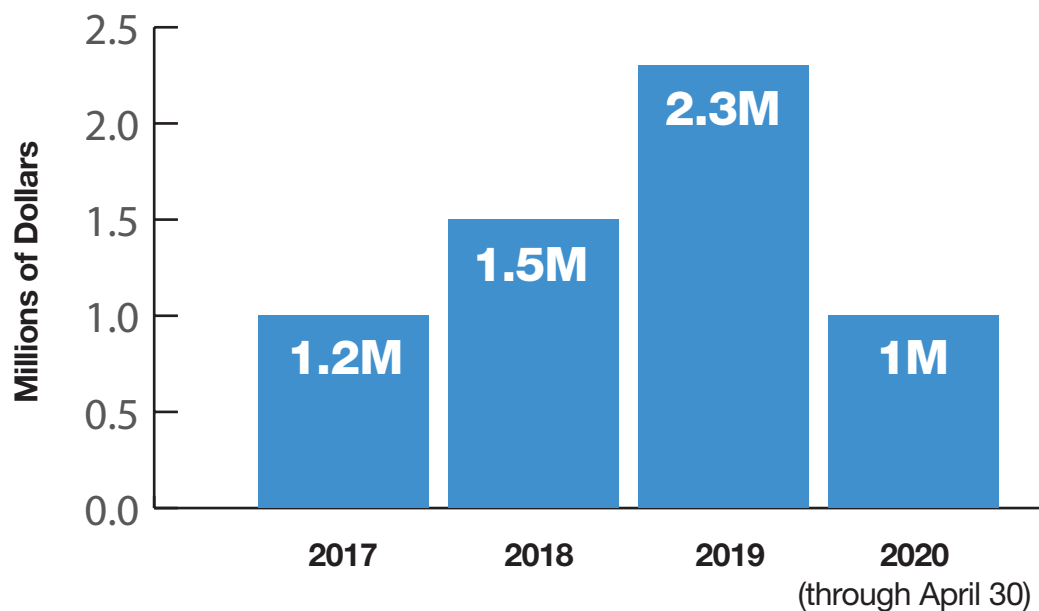


# Hoag Innovators Impact

## Innovators Giving Summary



Funds Raised



Funds Allocated

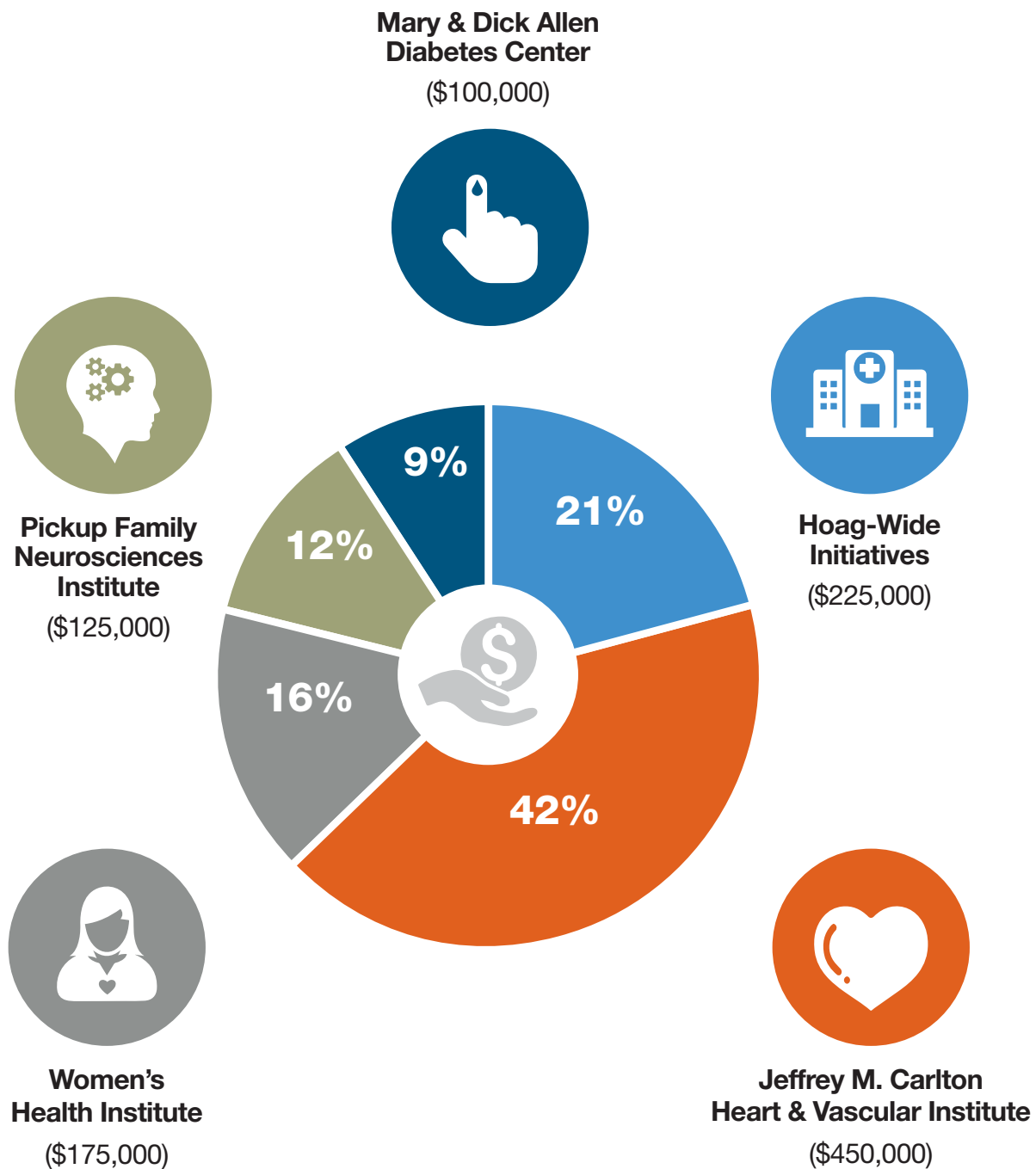
Marfan Syndrome & Related Conditions Program - \$250,000
KODEX – EPD 3D Cardiac Mapping - \$200,000
Pacify Application Pilot - \$175,000
Invenio NIO Laser Imaging - \$125,000
Leaf Device Implementation in Critical Care Units - \$125,000
Klue App Pilot in Gestational Diabetes - \$100,000
Transitional Care Pilot - \$100,000

**TOTAL: \$1,075,000**

## Impact Across Hoag

In its first year of philanthropic investment, Hoag Innovators has already made a significant impact on Hoag and its innovation strategy. The groundbreaking projects funded represent extraordinary gains in health care in a wide range of medical specialties. These advances simply would not be possible without the Innovators' philanthropy and, as a result, Hoag is better equipped to provide innovative and world-class care to our community.

### Distribution of Innovators Funds Across Hoag



# Hoag Innovators Impact

## Update on Projects Funded

### Marfan Syndrome & Related Conditions Program

Expert Care Locally for Patients with Rare Disease

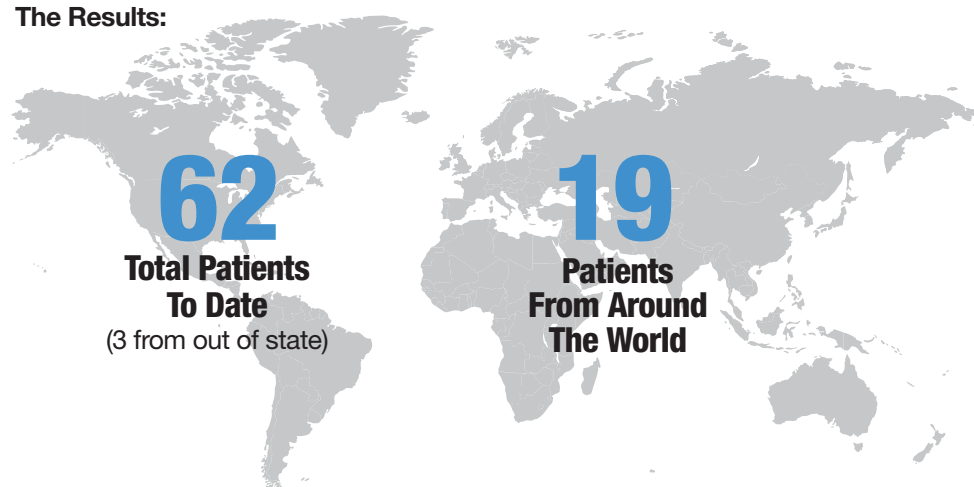
#### The Opportunity:

Marfan syndrome is a rare and life-threatening genetic condition that puts patients at risk for aortic disease and dissection. Few programs exist in the US, so many patients must travel for expert care.

#### The Innovation:

Hoag's comprehensive Marfan Syndrome & Related Conditions Program launched in 2019. World-renowned cardiologist Dr. David Liang, who was recently recruited from Stanford, leads Hoag's multidisciplinary team of experts. The only comprehensive Marfan syndrome program in Southern California, it's also the only one at a community hospital in the United States.

#### The Results:



#### National recognition of Hoag's program

In 2022, Hoag will host the Marfan Foundation's Annual Conference, a first for a non-academic institution.



People and Programs

*"I had open-heart surgery at the age of 32. I received very little explanation of why I went from a healthy member of the U.S. Air Force to having an aortic aneurysm and bad aortic valve and, soon thereafter, a pacemaker. When I came to Hoag, Dr. Liang and the team explained more about my condition to me in a few hours than I learned in three years with other doctors. My quality of life is the best it has been in the last three years. I am truly thankful."*

Ryan

Hoag Marfan Syndrome & Related Conditions Program Patient

**KODEX - EPD 3D Cardiac Imaging**

Enhancing Electrophysiology Procedures for Arrhythmia Treatment

**The Opportunity:**

Dramatically improve cardiac imaging to enhance electrophysiology procedures for arrhythmia treatment while minimizing radiation exposure to both patients and clinicians.

**The Innovation:**

The KODEX - EPD 3D Cardiac Imaging system provides real-time, high definition images of the patient's anatomy during cardiac electrophysiology procedures without exposing the patient or clinical team to radiation. The detail achieved in the images is unmatched, giving electrophysiologists a more complete view of the patient's cardiac anatomy and anatomical variations. Subsequently, therapy is personalized, more precise and more effective.

**The Results:**

Hoag adopted the novel technology in November 2019 and identified opportunities for it to integrate more effectively with existing technological systems. Because of Hoag's leadership and expertise in the arrhythmia space, KODEX has called on Hoag's team to collaborate in developing the technology further to maximize its benefit. The Innovators' investment drives Hoag forward as a leader in cardiac care.

**Technology****Pacify App Pilot**

Supporting Healthy Moms and Babies

**The Opportunity:**

Provide virtual and convenient support to mothers and babies in the transition from the delivery room to caring for a newborn in the home environment.

**The Innovation:**

The Pacify App allows for virtual, 24/7, on demand access to helpful postpartum resources, including lactation consultants, nutritionists, midwives and social workers. Available in both English and Spanish, the app serves as a critical support at the stage moms need it most. The Innovators' funding for the pilot provides access to new moms at no cost.

**The Results:**

**Hoag is the first** hospital to offer Pacify to every maternity patient at no cost

# Hoag Innovators Impact

## Update on Projects Funded



### Technology

#### Invenio NIO Laser Imaging

Reducing Length of Surgery for Patients

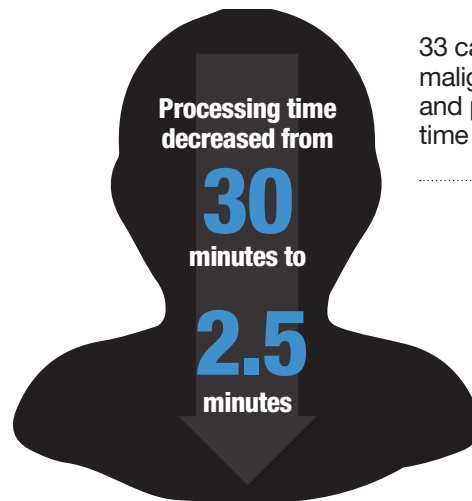
##### The Opportunity:

Decrease patient time spent in surgery by minimizing the wait for pathology analysis of the patient's specimens.

##### The Innovation:

The NIO Pathology and Slide Imaging System allows examination of specimens from multiple sites in the patient in real time rather than waiting 30 minutes or more for each sample to be analyzed in the pathology lab before surgery can continue. The high quality of the Invenio images allow neurosurgeons to make a more accurate diagnosis in some cases. The Hoag team recently completed connectivity to Ambra, a cloud-based image management system, for web streaming of images directly from the OR to the lab, enabling further streamlining and more rapid diagnosis.

##### The Results:



33 cases to date include benign and malignant tumors of the brain, skull base and pituitary. Average imaging processing time is down from 30+ minutes.

**Expanding use** beyond neurosurgery to other surgical specialties.

Hoag's promise is to lead, not follow. Only the pioneers will thrive in the long-term. Success is inextricably linked to the willingness and the ability to innovate.







## Technology

## Leaf Device Implementation in Critical Care Units

### Preventing Pressure Injuries to Critical Care Patients

#### The Opportunity:

Patients endure painful hospital-acquired pressure injuries (HAPIs) – injuries to the skin or underlying tissue from prolonged pressure – when their mobility is limited or when they are unable to change positions in bed. HAPIs can complicate a patient's recovery, but they can be prevented through timely patient repositioning.

#### The Innovation:

The Leaf device is an innovative monitoring system that uses a sensor adhered to the patient's chest to detect their position and movement. The care provider can remotely monitor and go into the room to reposition the patient at exactly the right time to prevent injuries from prolonged pressure. Leaf is being expanded to all CCUs at Hoag.

#### The Results:

**Better Care  
Coordination**  
among staff

**99%**  
**Reduction**  
in HAPIs

**100%**  
**Reduction**  
in preventable ulcers

## Klue App Pilot in Gestational Diabetes

### Using Artificial Intelligence to Motivate Healthy Behavior

#### The Opportunity:

Help patients with gestational diabetes live healthier lives through positive behavior change with AI and the Apple Watch.

#### The Innovation:

Developed by an individual with type 1 diabetes, the Klue App detects when the user is eating or drinking and provides in-the-moment guidance to encourage healthy behaviors, including checking one's blood sugar and mindful eating. The software also passively tracks every bite or sip so that, over time, it can create a personalized profile of consumption habits that can be shared with physicians or other caregivers. Funding would support app development specifically for use with Hoag gestational diabetes patients.

#### The Results:

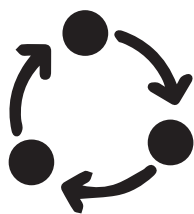
Due to the vast potential of the Klue App, the startup was acquired by the leading medical technology company Medtronic following the Innovators' investment in Hoag's pilot program. David Ahn, M.D., who holds the Dr. Kris V. Iyer Endowed Chair in Diabetes Care and is the program director for the Mary & Dick Allen Diabetes Center, has been in discussions with Medtronic, Hoag Hospital Foundation and Hoag leadership to determine whether to continue pursuit of the pilot or return the funding to the Innovators Fund.

# Hoag Innovators Impact

## Update on Projects Funded



### Transitional Care Pilot Program Preventing Hospital Readmissions



#### Process

#### The Opportunity:

Patients with multiple, complex medical conditions face obstacles in their recovery upon discharge from the inpatient setting. From an inability to follow up with their physician or obtain prescribed medications to difficulty reconciling those new medications with the previous ones to simply not having groceries for healthy meals, these difficulties can lead to emergency department visits and hospital readmissions.

#### The Innovation:

Hoag launched the one-year Transitional Care Pilot, funded by the Hoag Innovators, to develop a better way to support these patients. Those enrolled in the pilot receive post-discharge home health care and resource coordination designed to help them navigate their complex medical journey, reduce length of stay and prevent unnecessary hospital readmissions and ER visits.

#### The Results:

The pilot is currently in process and, when complete, data and learnings gained can be scaled to all discharged patients to contribute to a healthier recovery for every patient.



*“When we evaluated our philanthropic commitment to Hoag, we envisioned a platform for us and other like-minded donors to support multiple initiatives while learning and growing along the way. We are excited about how this dynamic group of donors is helping Hoag drive health care innovation here in our community.”*

**Kitty and Robert Brunswick**  
*Founding Innovators*

For more information about Hoag Innovators, please contact  
Christy Ward, Vice President, Principal Gifts, at (949) 764-7238 or [Christy.Ward@hoag.org](mailto:Christy.Ward@hoag.org).



*“Hoag physicians in every Institute and specialty are on the front line of medical advances through collaborations with leading companies and startups as well as through their own ideation and creation of processes and techniques that improve patient quality and outcomes. The Innovators are catalyzing progress not only across the Hoag enterprise but in medicine as well.”*

**Michael Brant-Zawadzki, M.D., F.A.C.R.,**

*Ron & Sandi Simon Executive Medical Director Endowed Chair, Pickup Family  
Neurosciences Institute, Senior Physician Executive, Hoag*



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