By the Numbers

#1 in Los Angeles County for Number of Inpatient Neurosciences Discharges

#11 in Neurology and Neurosurgery, 2021-22
U.S. News & World Report

82% of all neurosurgery residency applicants in the United States applied to Cedars-Sinai—a total of 328 applicants for two slots.

8.4% Cedars-Sinai’s Comprehensive Stroke Center has the lowest mortality rate in the U.S. for ischemic strokes among Medicare patients, according to new data from the Centers for Medicare & Medicaid Services.
For the second year in a row, we are writing to you amid a pandemic. In 2021, we delivered world-class care while confronting historic challenges, and we continued to make major strides in neurosurgery and neurology while serving as an essential ally in our community’s fight against COVID-19.

We are proud to offer world-class care for over 150 complex neurological disorders, and are known for our state-of-the-art research, our clinical outcomes and the personalized attention we give each patient. In this report, you can read about recent breakthroughs we made in the treatment of cerebrospinal fluid leak, for example. Our specialists have unmatched expertise in this hard-to-detect disorder, making Cedars-Sinai a destination of choice for CFS leak patients across the U.S. and beyond. You will also learn about major developments in treating skull-base tumors and the trailblazing work we continue to do for conditions such as Parkinson’s disease and memory disorders.

While we are proud of our accolades and achievements, we are most gratified when we help fulfill Cedars-Sinai’s core mission of improving the health status of the community. The pandemic and the civic unrest of 2020 served as stark reminders of inequities in our society. Cedars-Sinai was founded by individuals who cared deeply about justice and equity, and who believed that access to healthcare is an essential right. We continue to strengthen our long-standing commitment to inclusiveness and equity—from our recruitment for fellowships and residencies to our community services and outreach. More hard work remains, yet the unwavering energy and commitment of our faculty, staff and supporters carries us forward and strengthens our mission.

Keith L. Black, MD  
Chair, Department of Neurosurgery  
Ruth and Lawrence Harvey Chair in Neuroscience

Nancy L. Sicotte, MD, FAAN  
Chair, Department of Neurology  
Women’s Guild Distinguished Chair in Neurology
Leading-Edge Research and Treatments

In 2021, we hosted the Fourth Annual Cedars-Sinai Intracranial Hypotension (SIH) Symposium for healthcare providers, patients and caregivers. We reported that MRI-myelography is an excellent noninvasive alternative to CT-myelography, that SIH can rarely be caused by skull-base CSF leaks, and that multiple CSF leaks are uncommon. We also published the only community-based epidemiologic study of SIH.

The CSF Leak Program also began offering paraspinal vein embolization to patients with SIH caused by CSF-venous fistulas. Our investigators have discovered that superficial siderosis is potentially reversible with early treatment of the underlying spinal CSF leak. A review article on SIH was published in the New England Journal of Medicine.

Advanced treatment options and an unmatched expertise to care for all forms of this difficult-to-detect disorder

- Most highly cited article on CSF leaks in JAMA
- 80 peer-reviewed publications on CSF Leak
- Published the only study regarding the long-term risks of persistent CSF leak
A powerful incubator for pioneering techniques

**Skull-Base Tumors Expertise**

Cedars-Sinai was among the first to offer a comprehensive and truly multidisciplinary approach to diagnosing and treating all skull-base conditions—from pituitary tumors to meningiomas, craniopharyngioma, chordomas and acoustic neuroma—with a clear expertise in endonasal approaches and minimally invasive endoscopic methods.

On the research side, investigators are currently engaged in developing an immunotherapy protocol to treat patients with neurofibromatosis 2 who develop multiple brain tumors. Additionally, the Pituitary Apoplexy Surgical Timing and Outcome Registry (PASTOR), a project initiated at Cedars-Sinai, provides definitive guidelines for the treatment of pituitary apoplexy and gathers data about treatment approaches and outcomes from nine medical centers in the U.S., Canada, Europe and Asia, with results to be published and presented in 2022.

**Newly Awarded Grants**

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<tr>
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<th>Neurology</th>
<th>Neurosurgery</th>
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<tr>
<td>Federal</td>
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<td>7</td>
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<tr>
<td>NonFederal</td>
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<td>4</td>
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<tr>
<td>SubAwards*</td>
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<td><strong>Total</strong></td>
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* Federal and nonfederal
Expertise and Team Approach

The recently founded Jona Goldrich Center for Alzheimer’s and Memory Disorders continued to blaze a trail of excellence with a strong focus on diversity, equity and inclusion. The center launched multidisciplinary memory evaluation clinics, enabling patients to see the full memory disorders team (physicians, nurse practitioners, neuropsychology, pharmacy, social work and genetic counseling) in one clinic day. Community outreach to underserved populations, access to cutting-edge research, and initiatives to screen patients for cognitive impairment in primary care and ED settings are just a few of the center’s many clinical offerings.

In tandem with the center, the Department of Neurology established a Neurobehavior Program to broaden educational, clinical and research expertise in cognitive neurology. A central research focus is the new Alzheimer’s clinical trials program which is slated to launch its first drug study to investigate the most promising therapeutic approaches to Alzheimer’s disease and related dementias in Spring 2022. Starting July 2022, the Cedars-Sinai Behavioral Neurology Fellowship Program will commence training the next generation of physician leaders in behavioral neurology.

Transforming the landscape of research and clinical care

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<th>Volume</th>
<th>Visits*</th>
<th>Stroke</th>
<th>Surgical**</th>
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<tr>
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<td>59,938</td>
<td>1,033</td>
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* Inpatient and outpatient, Neurology/Neurosurgery/Spine
**Includes brain tumor, neurovascular, interventional radiology and spine
Clinical and Research Innovation

Patients with Parkinson’s admitted to the hospital are at a higher risk of complications. Our Parkinson’s Inpatient Outcomes Project task force—in collaboration with the IT department, inpatient pharmacy, nursing education and the Emergency Department—created an alert system for inpatients with Parkinson’s to monitor proper treatment process. The center was the first in Los Angeles to offer a multidisciplinary Parkinson’s clinic where patients can take advantage of multiple specialties in a single location to comprehensively address the complexity of their symptoms.

On the bench side, our investigators completed a clinical trial to test a Type 2 diabetes drug, the GLP-1 agonist liraglutide, as a potential treatment for Parkinson’s. The trial was part of the Linked Clinical Trials initiative, accelerating the development of new Parkinson’s treatments by repurposing drugs already approved for other conditions. Results will be presented at the American Academy of Neurology in April 2022.

The highest standard of care, innovative research, teaching and outreach for Parkinson’s patients
Named one of the best hospitals for Neurology and Neurosurgery in the U.S.

At Cedars-Sinai, the dedication of our doctors and staff has made us one of the most recognized hospitals in the nation. We’re proud to have earned a place on U.S. News & World Report’s Best Hospitals Honor Roll. This recognition belongs to our entire team who shows up day after day, night after night, to care for patients from around the world.

Learn more about our specialty care: cedars-sinai.org/neuro