

### JD LIPANI RADI SURGERY INSTITUTE



FOR NON-INVASIVE NEUROSURGERY

## Cutting Edge Neurosurgery ...Without the Cutting Edge

DEFINITIVE BRAIN AND SPINE TUMOR TREATMENT WITH

- NO INCISIONS
- NO ANESTHESIA
- NO RECOVERY TIME

elcome to the JD Lipani Radiosurgery Institute, the nation's first dedicated institute for non-invasive neurosurgery! We are leading experts in non-invasive or knifeless brain and spine surgery located in Greater Princeton, New Jersey. Our Neurosurgeon-In-Chief, Dr. John Lipani, offers definitive brain and spine tumor treatment, as well as treatment for trigeminal neuralgia with no pain, no anesthesia, no incisions and no recovery time.

Using advanced radiosurgery technology we stop the growth of benign and malignant tumors affecting the brain and spine. Our goal is to preserve quality of life by helping our patients maintain healthy brain and spine function. Our patients often avoid open brain and spine surgery and/or potentially harmful radiation therapies. We also treat chronic pain conditions such as **trigeminal** and **glossopharyngeal neuralgia**, all without open surgery! Our treatment strategies are so advanced they are only offered at relatively few cancer centers worldwide.

John D. Lipani, MD, PhD, FAANS, FACS

Dr. Lipani is the founding director of the JD Lipani Radiosurgery Institute for non-invasive neurosurgery. A nationally recognized expert in radiosurgery, Dr. Lipani treats brain and spine tumors definitively with extreme precision and accuracy while preserving neurologic function. Dr. Lipani also treats neuropathic pain disorders such as trigeminal neuralgia and glossopharyngeal neuralgia using radiosurgery. The JD Lipani Radiosurgery Institute combines state-of-the-art technology with unparalleled clinical expertise and experience.

#### WHAT WE TREAT

#### **Metastatic Brain and Spine Tumors**

- Breast Cancer
- Lung Cancer
- Prostate Cancer
- Renal Cell Cancer
- Malignant Melanoma
- Others

#### **Benign Brain and Spine Tumors**

- Acoustic Neuromas
- Pituitary Adenomas
- Meningiomas
- Neurofibromas
- AVM's
- Others

#### **Neuropathic Pain Conditions**

- Trigeminal Neuralgia
- Glossopharyngeal Neuralgia

# Why choose the JD Lipani Radiosurgery Institute?



our healthcare deserves the latest medical technology combined with the most advanced clinical expertise. At the JD Lipani Radiosurgery Institute, Dr Lipani has extensive formal training and experience using several of the latest radiosurgery devices including Gamma Knife and CyberKnife. We offer the latest and greatest in brain and spine tumor treatment without making any incisions. This means that brain and spine tumors can be treated effectively with no pain, no anesthesia and no recovery time. Our patients often avoid other potentially harmful treatment options such as whole brain radiation therapy, spinal radiation, open brain surgery, or complex spinal surgeries. We also offer treatment for brain and spine tumors that are considered inoperable or that have failed previous therapies. Dr Lipani routinely performs both conventional (open) neurosurgical procedures and noninvasive (knifeless) radiosurgery. Therefore, he is able to present all treatment options to patients in an unbiased manner to help them make a well informed decision.

When it comes to brain and spine cancer, watching and waiting is not an option. Cancer that spreads to the brain and spine can be devastating, but only if it is allowed to progress with other less effective treatment options. At the JD Lipani Radiosurgery Institute, our goal is simple; stop the progression of brain and spine disease before it stops you! Our pledge is to preserve brain and spine function and allow our patients to maintain a healthy quality of life!



#### WHAT IS RADIOSURGERY?

Radiosurgery is a knifeless technology that uses high dose radiation delivered to precise locations for purposes of treating diseased tissue. In most cases, the target tissue is a tumor consisting of either a benign (i.e., non-cancerous) or metastatic lesion (i.e., cancer that spreads from a distant location). In other cases, such as with trigeminal neuralgia, the target is a cranial nerve for treatment of severe facial pain. Radiosurgery has an advantage over traditional radiation in that it can be used to deliver higher more effective radiation dose to tumors with minimal exposure to surrounding healthy tissue. The result is stopping tumor growth with reduced risk of side effects. Radiosurgery can often be used as an alternative to open conventional brain and spine surgery. It is generally delivered in 1-5 consecutive daily treatment sessions on an outpatient basis.



Princeton Neurological Surgery

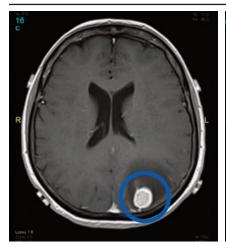
In affiliation with: www.PrincetonNeurologicalSurgery.com

At the JD Lipani Radiosurgery Institute, success is achieved in > 98% of cases!





64 y/o female - metastatic lung carcinoma with spread to brain

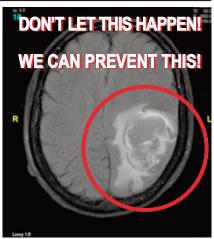


**BEFORE** CyberKnife radiosurgery **Brain Tumor-left cerebral hemisphere** 



**AFTER** CyberKnife radiosurgery

- stop tumor growth
- preserve brain function
- avoid brain injury
- avoid brain surgery
- preserve quality of life



Similar tumor treated with alternative therapy.

- failure to stop tumor growth
- irreversible brain injury
- permanent functional impairment
- brain surgery required
- worsening quality of life

## With radiosurgery, more effective treatment doses can be precisely applied to the target which protects surrounding healthy tissue and stops tumor growth.

53 y/o female - metastatic breast cancer with spread to spine



**BEFORE** CyberKnife radiosurgery **Spine Tumor-thoracic vertebral body** 



AFTER CyberKnife radiosurgery

- stop tumor growth
- prevent vertebral body collapse
- avoid spinal chord injury and paralysis
- · avoid spinal surgery
- preserve quality of life



#### Similar tumor treated with alternative therapy.

- failure to stop tumor growth
- vertebral body collapse
- spinal chord injury and paralysis
- spinal surgery required
- worsening quality of life



### **Meet Dr. Lipani**

r. Lipani is the founding Director of the JD Lipani Radiosurgery Institute for non-invasive neurosurgery and Princeton Neurological Surgery, for comprehensive brain and spine surgery. He previously served as the founding Director of the Institute for Neurosciences at Capital Health in Trenton, NJ. Dr. Lipani also headed the first Neurosurgical Oncology program at Capital Health and founded Capital's CyberKnife Radiosurgery program of the Penn Cancer Network.



Prior to Capital Health, Dr. Lipani served as a Clinical Instructor in Neurosurgery at Stanford University and is currently an Adjunct Clinical Assistant Professor of Neurosurgery at Thomas Jefferson University Hospital and Jefferson Medical College.

Dr. Lipani is Board Certified by the American Board of Neurological Surgeons, a Fellow of the

American Association of Neurological Surgeons, and a Fellow of the American College of Surgeons.

Dr. Lipani received his training in neurosurgery at Thomas Jefferson University Hospital and Children's Hospital of Philadelphia of the University of Pennsylvania. He spent several years at the Delaware Valley Regional Spinal Cord Injury Center at Jefferson, one of the nation's 16 centers of excellence for spinal disorders and participated in the combined neurosurgical and orthopedic spine fellowship program. He completed a fellowship at NYU Medical Center in neurosurgery with a focus on complex spinal surgery and he also completed a fellowship in neurosurgical oncology and radiosurgery at Stanford University Medical Center and Stanford Cancer Institute. Dr. Lipani received extensive training in CyberKnife radiosurgery under Professor John R. Adler, MD, inventor of CyberKnife. Dr. Lipani remains one of a select few neurosurgeons worldwide to have completed this prestigious and exclusive fellowship training program. During his time at Stanford, Dr. Lipani received the Radiosurgery Society's Physician Scientist Award for his research devoted to the treatment of primary brain tumors.

### At the JD Lipani Radiosurgery Institute, we pledge to:

- pursue early definitive treatment
- · stop brain and spine tumor growth
- · protect brain and spine function
- · practice close post treatment vigilance
- avoid unnecessary open brain and spine surgery
- · avoid unnecessary radiation therapy
- provide conventional surgical intervention if necessary

Dr. Lipani also received specialized post-residency training in Gamma Knife radiosurgery under Professor L. Dade Lunsford at the University of Pittsburgh, the birthplace of the North American Gamma Knife.

Having treated over 3,500 brain and spine radiosurgery cases, Dr. Lipani is known as one of the nation's top brain and spine surgeons and serves as a leading expert in brain and spine radiosurgery on three internationally recognized advisory review boards. He has lectured and authored numerous peer-reviewed abstracts, articles, and book chapters on brain and spine radiosurgery.

Dr. Lipani is an active member of several professional societies including the Radiosurgery Society, Congress of Neurological Surgeons, American Association of Neurological Surgeons, North American Spine Society, and AANS/CNS Joint Section on Tumors.



#### For Information or Appointments:

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