## A Local Physician Brings Advanced Neurosurgical Techniques to the Region

## Riverhills Healthcare, Jonathan A. Borden M.D., F.A.C.S.

he talented physicians at Riverhills Healthcare provide comprehensive, leading edge medicine to patients suffering from potentially devastating neurological and spinal conditions. Specializing in neurology, neurosurgery and MR imaging, Riverhills works with seven of the area's leading hospitals to provide total care for its patients, from diagnosis, to treatment, to rehabilitation.

Dr. Jonathan A. Borden, who in 2008 was named Chief of Neurosurgery at Bethesda North Hospital, has emerged as a leader at Riverhills, developing innovative procedures for treating conditions of the brain and spine. He has engineered exciting techniques in Internet telemedicine and served on technology panels for NASA and other national groups such as the World Wide Web Consortium (W3C) and the American Society for Testing and Materials (ASTM).

Research is a fundamental part of Dr. Borden's long career in neuroscience. For more than 20 years, he has performed award-winning studies and has authored papers in molecular neurobiology, blood vessel malformations in the brain and spine and minimally invasive radiosurgical techniques for treating brain tumors. In fact, Dr. Borden

is the only neurosurgeon in Cincinnati who performs Gamma-Knife radiosurgery, a complex procedure that uses radiation to perform brain surgery without opening the skull—often a safer option for many patients than traditional brain surgery.

In addition to his work with innovative surgical procedures, Dr. Borden is involved in research concerning growth factors and stem cell techniques to regenerate spinal discs. He is an expert in both minimally invasive and motion preserving neck and back surgery, developing procedures that use low profile implants and artificial discs that dramatically improve patient care. Dr. Borden and his team anticipate that their work in stem cell and growth factor based disc/spine regeneration will come into widespread use in the future.

The innovations pioneered by Dr. Borden and the many dedicated physicians at Riverhills Heathcare provide skill, expertise and hope to individuals afflicted with life-altering brain and spinal conditions.

To learn more about the breakthroughs in neurosurgical treatments at Riverhills Healthcare, visit www.cincinnatimagazine.com/ innovationsinhealthcare.





**(Top)** The Reflex Zero Profile Anterior Cervical Plate features a unique, H-shaped design. Like an I-beam in construction, the cross bar is designed to deliver torsional strength to help provide stability and motion control while interfering less with delicate tissues of the neck.

(Bottom) Dr. Jonathan Borden M.D., F.A.C.S., Chief of Neurosurgery