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NEWS RELEASE

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Barrow Neurological Institute Scientist Leads Research on Long-neglected Brain Region

(PHOENIX, AZ) — A scientist at Barrow Neurological Institute is leading the global discussion and research on a hidden lobe of the brain called the insula. A.D. "Bud" Craig, PhD, who began studying the often-ignored lobe more than two decades ago, has organized and edited a special edition of the journal *Brain Structure and Function* dedicated to the emerging medical and scientific interest in the insula.

This special edition contains 21 articles describing the latest research and insights from scientists and clinicians from around the world who recognize the insula as the key to their own field of interest and perhaps human consciousness.

The insula is a prune-sized area located deep within the brain. It was long ignored because scientists could not probe the area with surface electrodes. With the invention of sophisticated brain imaging techniques such as functional magnetic resonance imaging, or fMRI, activation of the region has been observed in a surprisingly wide range of studies.

"Rapidly accumulating evidence indicates that this area of the brain is uniquely involved in virtually every human emotion and behavior," says Dr. Craig. "Similarly, clinical evidence indicates that it is crucially involved in a variety of syndromes, including addiction, anxiety, depression, anosognosia, schizophrenia and frontotemporal dementia."

Dr. Craig says that the overall goal of the special issue about the insula in *Brain Structure and Function* is to provide a solid starting point for new investigators by identifying the issues and opportunities for advances in the knowledge of this unique portion of the human brain.

An "intense" discussion about the role of the insula is urgently needed, says Dr. Craig, because many researchers have not had knowledge of its role and so little had been written about it.

"The insula is finally emerging from its hiding place inside the brain," says Dr. Craig. "Its central importance to all human feelings and behaviors makes it an extraordinarily important target for potential treatments of many mental dysfunctions, using drugs or sophisticated biofeedback methods."

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About Barrow: Barrow Neurological Institute at St. Joseph's Hospital and Medical Center in Phoenix, Arizona, is internationally recognized as a leader in neurological research and patient care and is consistently voted as among the Top 10 hospitals for neurology and neurology in the United States. Barrow treats patients with a wide range of neurological conditions, including brain and spinal tumors, cerebrovascular conditions, and neuromuscular disorders. Barrow's clinicians and researchers are devoted to providing excellent patient care and finding better ways to treat neurological disorders.