

Dialogue 6

## Brain Death and its Challenges

**Calixto Machado, M.D., Ph.D.**

*Institute of Neurology and Neurosurgery, Havana*

**Noon, Friday, April 29, 2011**

**RMSB 3rd-Floor Auditorium**

—————→ Please bring a lunch  
(No RSVPs required) ←————

The concept of death evolved as technology forced medicine and society to expand ancient cardiorespiratory definitions of death to include neurocentric diagnoses. Scientific advances of the last century produced mechanical ventilation and cardiopulmonary resuscitation, which gave rise to a condition previously impossible to imagine – a state in which the brain is massively damaged and nonfunctional while other organs continued to function. Is a patient in such a state alive or dead? Brain death was gradually accepted as death of the individual. It is commonly believed that the concept of brain death evolved to benefit organ transplantation, but both brain death and transplantation have separate origins. Organ transplantation became possible with technical advances in surgery and immunosuppressive treatment. The concept of brain death emerged with the introduction of intensive care units. Research on brain death, persistent vegetative states and, more recently, the minimally conscious state, continues to refine these concepts – and inform ethical debate.

Dr. Machado is President of the Cuban Society of Clinical Neurophysiology and of the National Commission for the Determination of Death. In 1992 he was the first Cuban elected as a Corresponding Fellow of the American Academy of Neurology and, in 2005, received the Academy's Lawrence McHenry Award in neurology, the first time a Hispanic neurologist, and a neuroscientist from a developing country, received the prize. He is Senior Professor and Researcher at Havana's Institute of Neurology and Neurosurgery. He has published more than 150 peer-reviewed articles, book chapters and books.

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