

Faculty Feature | Dr. David Loewenstein | Director, Center for Cognitive Neuroscience & Aging and Professor, Psychiatry & Behavioral Sciences

You have a long history with UM. Tell us about your ties to the university.

I have considerable ties and affection for the University. I was born at Jackson Memorial Hospital, my parents worked and taught at UM. As a kid I went to some of the UM football games and this is my 32nd year as a faculty member.

There are some exciting changes taking place in the department; recently, the Center on Aging was renamed the Center on Cognitive Neuroscience and Aging (CNSA), and you were named director. How will your role change?

The UMMSM has designated neuroscience as one of Four Pillars that is part of the strategic plan. My goal as the Director of the CNSA is to leverage cognitive neuroscience, brain disorders such as Alzheimer's disease (AD) and novel assessments and interventions for older adults. This ultimately puts our Department of Psychiatry in a unique position to be an integral part of our Neuroscience Pillar and the University of Miami's strategic plan.

What are some of the goals for the CNSA?

- To be national and international leaders in cognitive neuroscience by developing state-of-the-art novel paradigms for studying the aging brain and biomarkers of early disease processes
- Provide state-of-the-art treatments for older adults and their families to improve interventions and outcomes
- Lead the University of Miami to be part of a prestigious Alzheimer's Disease Research Center and make UM a major destination for older adults at risk for Alzheimer's disease and Related Disorders
- Continue to develop and maintain essential collaborations with other UM Departments and Centers as well as to maintain and expand our international collaborations.

You developed something called the Loewenstein-Acevedo Scales for Semantic Interference and Learning, or LASSI-L; a cognitive stress test to address the concern that current neuropsychological measures may not capture the earliest stages of AD. How will this new scale affect the intervention and/or treatment of the disease?

Drs. Rosie Curiel Cid, Elizabeth Crocco and myself strongly believe that the earliest manifestations of AD occur many years before clinical symptoms. LASSI-L is a cognitive stress test, akin to an exercise electrocardiogram. It is highly related to biological AD changes in the brain before the emergence of clinical symptoms such as amyloid load, fMRI functional connectivity and loss of volume and cortical thickness in the brain. Early detection leads to a better understanding of the pathogenesis of AD, preventive and earlier interventions and helps better screen participants who may benefit from these newer interventions. The LASSI-L has

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What do you most enjoy about your job and/or working in psychiatry?

I absolutely love devoting my career to studying the brain, by far the most complex organ in the body and key to unraveling many mysteries that will ameliorate disease and enhance quality of life. My colleagues in psychiatry at the CNSA are so talented and working with them is such an honor and pleasure.

How do you like to spend your free time?

I have a wife and two lovely children and spending time with them is a joy. I love reading, bible study in and out of church, running and collecting coins (which I have done since I was a small boy.) I also love creative writing and sports.

Words to live by?

I frequently tell my patients that truly important relationships are characterized by sacrificial love, respect and communication. I try to improve in these areas every day and recognize success without humility and gratitude often hollow.