

Sonia Villapol, PhD Assistant Professor Neurosurgery Brain-periphery Axis, Establishing Connections for Better Treatments

Dr. Sonia Villapol graduated from the University of Santiago of Compostela (Spain) with a bachelor's degree in Molecular Biology and Biotechnology in 2003. She received her master's degree and Ph.D. in Neuroscience from the Autonomous University of Barcelona (Spain) in 2007. She worked as a postdoctoral fellow at CNRS in the University Pierre and Marie Curie VI and at INSERM in Paris, France (2007-2010) and at the National Institutes of Health, Center for Neuroscience and Regenerative Medicine, and Uniformed Services University (USUHS) in Bethesda, Maryland from 2010 to 2014. Following her postdoctoral research work, Villapol joined the Department of Neuroscience at Georgetown University in Washington, D.C. as a Research Assistant Professor in May 2014. In July 2018, she started as a faculty member at the Center for Neuroregeneration at Houston Methodist Research Institute as Assistant Professor of Neurosurgery. Dr. Villapol has received extramural research funding as Principal Investigator from NIH, and she serves as a standing member at Molecular Neurogenetics NIH Study Section (MNG). She is also an Associate Editor for Cellular and Molecular Neurobiology (Springer Journal). She has published over 60 articles in peer-reviewer journals and book chapters.

Currently, our lab is exploring the role of the gut microbiome and brain damage and studying biomimetic nanoparticles as a theranostic tool for brain injury and neurodegenerative diseases. We currently develop preclinical and clinical projects. We are also using our resources and expertise to focus on understanding the role of microbiome on acute and long-COVID-19.