Juan M. Pascual, M.D., Ph.D., is the inaugural holder of *The Once Upon a Time Foundation Professorship in Pediatric Neurologic Diseases* and also holds the *Ed and Sue Rose Distinguished Professorship in Neurology* at the University of Texas Southwestern Medical Center.

Biography

Juan M. Pascual, M.D., Ph.D., is the inaugural holder of *The Once Upon a Time Foundation Professorship in Pediatric Neurologic Diseases* and the holder of the *Ed and Sue Rose Distinguished Professorship in Neurology*.

Dr. Pascual is a tenured Professor in four Departments at The University of Texas Southwestern Medical Center at Dallas: Neurology, Physiology, Pediatrics and the Eugene McDermott Center for Human Growth & Development / Center for Human Genetics, and is Director of the **Rare Brain Disorders Program** (Clinic and Laboratory). He is also a member of the Division of Pediatric Neurology, of the graduate Ph.D. programs in Neuroscience and Integrative Biology, and of the postgraduate clinical training programs in Neurology, Pediatric Neurology, Pediatrics and Medical Genetics. He also teaches at the UT Southwestern Medical School.

In addition, Dr. Pascual is an adjunct professor in the Department of Biological Sciences at the School of Natural Sciences and Mathematics, The University of Texas at Dallas.

Dr. Pascual directs a highly collaborative research laboratory and is credentialed campus-wide at Children's Medical Center Dallas, UT Southwestern University Hospitals and Clinics and Parkland Memorial Hospital, where he consults on inpatients and outpatients with particularly complex or severe diseases. Much of his research is funded by the National Institutes of Health.

His laboratory research interests span virtually the entire field of neuroscience, including medical neuroscience, from molecular structure and function (including drug action), neural physiology and metabolism at the cellular, circuit and whole-brain level and neurogenetics, all of which is complemented with neurological patient care and clinical trials. Laboratory research greatly influences his clinical activities and patient observations guide his laboratory research direction.

Dr. Pascual received his M.D. degree with unique distinction from the Universidad de Granada, Spain, one of the oldest universities in the world, founded in 1349 by Yusuf I, Sultan of Granada and one of the builders of the Alhambra. He received his Ph.D. degree in Molecular Physiology and Biophysics from Baylor College of Medicine in Houston, Texas, under Arthur M. Brown, MD, PhD, McCollum Professor and Chair. His postdoctoral research was conducted under Arthur Karlin, PhD, Higgins Professor and Director of the Center for Molecular Recognition, College of Physicians and Surgeons of Columbia University and, later, at the Colleen Giblin Research Laboratories for Pediatric Neurology at the same institution under a Neurological Sciences Academic Development Award from the National Institute of Neurological Disorders and Stroke. He also received residency training in Pediatrics at Washington University School of Medicine - St. Louis Children's Hospital and in Neurology and Pediatric Neurology at the Neurological Institute of New York - Columbia University Medical Center. He received certification in Neurology with Special Qualification in Child Neurology from the American Board of Psychiatry and Neurology.

As one of few actively practising pediatric neurologists in the nation who is also a laboratory scientist, Dr. Pascual is interested in the molecular mechanisms that cause inherited metabolic and excitability disorders using electrophysiology and nuclear magnetic resonance (MRI) both in human subjects and in models of human diseases. His laboratory is an integral part of the Department of Neurology. The laboratory is home to scientists from very broad backgrounds and levels of training and expertise who have joined efforts to ***endow both neurology and human developmental neuroscience with a strong scientific basis***.

As a clinician, Dr. Pascual specializes in genetic and metabolic diseases of the nervous and neuromuscular systems of infants, children and adults with a particular emphasis on complex diagnostic problems, second opinions for patients visiting from the rest of the U.S. and abroad, and in clinical trials. Dr. Pascual has special clinical research expertise in rare diseases, glucose metabolism, mitochondrial, degenerative, and multi-organ disorders.

Dr. Pascual has co-authored over three dozen scientific, medical and philosophical textbooks. He is the editor, together with Dr. Roger Rosenberg of *Rosenberg's Molecular and Genetic Basis of Neurological and Psychiatric Disease* (5th to current 7th edition, two volumes, near 2000 pages). His textbook *Progressive Brain Disorders in Childhood* (Cambridge University Press) was published in 2017. He is working on a new

book, provisionally entitled *Sense & Nonsense in Medical Neuroscience: Inference & Fallacy*, to be published by Cambridge University Press.

An avid reader and speaker, Dr. Pascual is also interested in the philosophy of mind. He is particularly concerned with the proper study of the human condition. Thus, he is a critic of errors commonly made by cognitive neuroscientists.

Pascual Laboratory

Recent clinical research studies

Recent NIH-funded research projects

Publications

Video lecture: Experimental augmentation of brain function

Video lecture: Metabolic treatments for brain diseases