

Research Units of Intelligent Technology for Health and Well-being  
& Nonlinear Physics and Mathematical Modeling

## Structural and Functional Neuroplasticity in Children with Cerebral Palsy

### Prof. Christos Papadelis, Ph.D.

Assistant Vice President of Neuroscience Research,  
*Cook Children's Health Care System*

Professor of Research in Bioengineering  
*University of Texas at Arlington*

Professor of Pediatrics  
*Burnett School of Medicine at Texas Christian University*



#### Biography:

Dr. Papadelis' research covers a broad range of studies in neuroscience, clinical neurophysiology, and biomedical engineering. Dr. Papadelis has >100 peer-reviewed research investigation articles, two patents, and numerous articles in conference proceedings. Some of his papers are published in top-tier scientific journals such as Brain, Nature Portfolio Digital Health, and Annals of Neurology. His research has been cited >5,500. He has received funding of more than \$7M from the National Institute of Neurological Disorders and Stroke, the National Institute of Children Health and Development, the American Epilepsy Society, the European Union, the the Harvard Medical School, the Cook Children's Health Foundation, the pharmaceutical industry, and private donors. His research focuses on developing an epilepsy biomarker and identifying brain changes in children with cerebral palsy.

#### Abstract:

Cerebral Palsy is a common neurological disorder and one of the most common motor disabilities in childhood. Children with cerebral palsy present several sensory and motor deficits. The cause of cerebral palsy is a brain insult that takes place either in utero or during birth. In this talk, Dr. Papadelis will present the work of his team on mapping brain plasticity in the brains of children with cerebral palsy by combining findings from several neuroimaging techniques. Dr. Papadelis will also present his most recent findings regarding the improvement of motor outcome in children with cerebral palsy as a result of rehabilitation of their upper extremities with a robotic device.

**11 Giugno 2025 - ore 15:30-16:30**  
**Sala Conferenze PRABB - PRABB**

Università Campus Bio-Medico di Roma  
Via Álvaro del Portillo, 21  
Info: Dr.ssa Margherita Matarrese  
([m.matarrese@unicampus.it](mailto:m.matarrese@unicampus.it))

[Scan or Click Here](#)  
[to Join Online](#)



Seminar