

## Trisomy 21 Research Society (T21RS)

Dear Members of the Trisomy 21 Research Society and Science & Society Committee,

I am writing to express my sincere interest in serving as Chair of the Science & Society Committee of the Trisomy 21 Research Society (T21RS). As a clinical psychologist with extensive expertise in developmental neuropsychology and a dedicated researcher in Down syndrome (DS), I am deeply committed to bridging scientific advances with the real-life needs of individuals with DS and their families. This dual perspective guides my belief in the crucial role of this committee in making research accessible, relevant, and empowering for the wider community.

I currently work as Clinical Psychologist at the Child and Adolescent Neuropsychiatry Unit of Bambino Gesù Children's Hospital in Rome, where I coordinate the Day Hospital clinical program for children and adolescents with Down syndrome from all over Italy. This role places me in continuous contact with families, providing me with a profound understanding of their challenges and the vital importance of clear, trustworthy communication about research findings and therapeutic options. My clinical experience is complemented by an academic career that includes a PsyD in Experimental Psychology (University of Palermo), a PhD in Cognitive Science and Rehabilitation (LUMSA Rome), and the Italian National Scientific Qualification as Associate Professor in General Psychology, Psychobiology, and Psychometrics since 2018. I also hold teaching roles in Cognitive and Clinical Neuroscience and Neuroethics at the European University of Rome, where I mentor students and foster new generations of researchers and clinicians.

My research portfolio is broad and multidisciplinary, with a longstanding focus on neurodevelopmental disorders, especially DS. I have led and contributed to multiple national and international grants aimed at exploring cognitive, behavioral, communicative, and psychological aspects of DS and other neurodevelopmental disorders, as well as innovative treatments. Early in my career, I investigated brain correlates of learning, memory, spatial abilities, and executive functions in children with DS. More recently, I have focused on sleep patterns and behavioral challenges across developmental stages, including oppositional behaviors and rare psychopathological manifestations such as delusions. I have also extensively studied parental perspectives on quality of life and parenting stress, along with environmental impacts like the COVID-19 pandemic, reflecting a holistic approach to DS.

A particularly innovative area of my current research is the combination of non-invasive neuromodulation techniques with cognitive rehabilitation to enhance language development in children and adolescents with DS. This promising approach exemplifies my commitment to translating scientific rigor into practical clinical interventions that improve daily functioning and wellbeing.

Since 2023, I have been an active member of the T21RS Science & Society Committee. This role has allowed me to contribute to fostering dialogue between researchers, clinicians, and the DS community. Notably, I played a key role in organizing the Science & Society Day at the 2024 T21RS International Conference in Rome, an event that successfully strengthened connections between science and society by providing families direct access to cutting-edge research and facilitating exchanges with experts. Additionally, I serve on the T21RS Child Development Committee, contributing to advancing knowledge on developmental trajectories in DS.

If given the opportunity to serve as Chair, I would dedicate myself to enhancing the visibility and accessibility of T21RS initiatives, developing evidence-based resources for families and professionals, and fostering inclusive communication strategies. I am enthusiastic about

collaborating with fellow committee members to ensure that our research continues to make a meaningful impact on the lives of individuals with DS and their families.

Thank you for considering my application. I look forward to the possibility of contributing further to the mission of T21RS and advancing science that truly serves society.

Sincerely,  
Floriana Costanzo, PsyD, PhD  
Bambino Gesù Children's Hospital  
Viale Baldelli 41, Rome  
floriana.costanzo@opbg.net