

# Dr. Giusy Olivito

## Psychologist-Psychotherapist, PhD

- 📍 Department of Psychology, Faculty of Medicine and Psychology, "Sapienza", University of Rome, Via de Marsi 78, 00185, Rome, Italy
- 📍 Ataxia Research Laboratory, IRRCS Santa Lucia Foundation, Via Ardeatina 306, 00179, Rome, Italy
- 📍 Neuroimaging Laboratory, IRRCS Santa Lucia Foundation, Via Ardeatina 306, 00179, Rome, Italy

☎ +393294909330

✉ g.olivito@hsantalucia.it  
giusy.olivito@uniroma1.it

### FORMAL EDUCATION

#### January 2011-March 2016

##### ***Post-graduate specialization in Cognitive-Behavioral Psychotherapy.***

Topics: Diagnosis and Treatment of Psychiatric Disorders.

Thesis Title: Generalized Anxiety Disease and Personality Disorder.

30/30 cum laude

#### November 2010 - December 2013

***Ph.D. in Behavioral Neuroscience***, Curriculum of Psychobiology and Psychopharmacology. Sapienza University of Rome (Italy) Supervisors: Prof. Maria Leggio; Prof Mara Cercignani ( University of Sussex). Title of the thesis: "Cerebellar cognitive information processing. Evidence from functional and structural MRI data".

#### July 2009

***Master Degree in Neuropsychology*** at Sapienza University of Rome. Evaluation: 110/110 cum laude.

Thesis: "Role of the cerebello-cerebral circuits in cognitive inhibition of actions".

#### September 2005

***Bachelor's degree in Clinical Psychology*** at Second University of Naples "Federico II", Faculty of Psychology,, Caserta, Italy. Thesis title: The Psychosomatic Factor in Cancer.

## RESEARCH EXPERIENCE

**July 2017 – current** Neuroimaging Laboratory and Ataxia Laboratory, IRCCS Santa Lucia (Rome)

Position: Research fellow

Title of the project: "Cerebellar-cortical circuits in Autism. Spectrum Disorders new perspectives for treatment implementation"

Topics: fMRI, DTI, Neuropsychology, Personality traits, Cerebellum

**June 2016 – July 2017** Neuroimaging Laboratory and Ataxia Laboratory, IRCCS Santa Lucia (Rome)

Position: Research fellow

Title of the project: "Clinical, Neuropsychological and quantitative MRI evaluation of patients affected by Multiple Sclerosis."

Topics: fMRI, DTI, Neuropsychology, Personality traits, Cerebellum

**January 2016 -June 2016.** Department of Psychology, Sapienza University of Rome, Italy

Position: Research fellow.

Title of the project: "Cerebellum, embodiment and virtual reality".

Topics: Structural and functional MRI, cerebellum.

**January 2014- December 2015:** Ataxia Laboratory and Neuroimaging Laboratory, IRCCS Santa Lucia (Rome).

Position: Research Fellow.

Title: "Anatomo-functional correlates of cerebello-cortical interaction: Diffusion tensor Imaging studies".

Topics: structural and functional MRI: diffusion tensor imaging and DTI-based tractography; resting-state functional MRI; voxel based tractography; Neurological disorders; Neuropsychological and behavioral testing; cerebellum; social cognition; Autism Spectrum Disorders; Neurodegenerative dementias (Alzheimer Disease); Myotonic Dystrophy.

**March 2014:** Clinical Imaging Science Center (CISC), Brighton and Sussex Medical School, Brighton, UK.

Position: Visiting Researcher.

Topics: Resting-state functional MRI data analysis

**April 2013-July 2013:** Clinical Imaging Science Center (CISC), Brighton and Sussex Medical School, Brighton, UK.

Position: Visiting PhD Student

Topics: anatomical and functional correlates of cerebro-cerebellar circuits; Diffusion Tensor Imaging, DTI based tractography and resting state fMRI. Supervisor: Prof Mara Cercignani

**2010-2013:** Ataxia and Neuroimaging Laboratory, IRCCS Santa Lucia, Rome *and* Department of Psychology, Sapienza University of Rome, Italy

Position: Research assistant and PhD student

Topics: Clinical and neuropsychological assessment; structural and functional MRI data processing and analyses; cerebellum.

**April 2008-October 2010:** Ataxia Laboratory, IRCCS Santa Lucia, Rome, Italy

Position: Pre-graduate internship and Post-graduate voluntary Internship.

Topics: neuropsychology, cerebello-cerebral circuits, cerebellar role in cognition.

## TEACHING EXPERIENCE

**October 2012-present:** Teaching Assistant for “Clinical assessment of the neurodegenerative pathologies”, Prof Maria Leggio, MD, PhD. Post-degree specialization School of Neuropsychology, Sapienza University of Rome  
Duties: Lectures and exams.

**November 2011-present:** Teaching assistant for “Cognitive Neuroscience”, Prof Maria Leggio, MD, PhD.  
Science and psychological techniques for normal and pathological cognitive processes analysis, Bachelor’s degree Course  
Faculty of Medicine and Psychology, Sapienza University of Rome  
Duties: Lectures and exams.

**November 2011-present:** Teaching assistant for “Cognitive Neuroscience”, Prof Maria Leggio, MD, PhD. Neuroscience and Psychological Rehabilitation, Master’s Degree Course, Faculty of Medicine and Psychology, Sapienza University of Rome.  
Duties: conducted weekly lab section on experimental methods and statistics; neuropsychological battery, clinical cases. Supervised and evaluated students’ lab experimentation. Selected questions for exams.

**Undergraduate and Postgraduate Student Supervision:** Tutoring of student and PhD students attending to the Ataxia and Neuroimaging Laboratory: 2 students supervised.

## CLINICAL EXPERIENCE

**May 2015-June 2016:**  
Psychological Counseling and Cognitive-Behavioral Therapy of Psychiatric Disorders. Psychiatric Unit, UOC Sant’Andrea Hospital. Director Prof Paolo Girardi - Supervisor Prof. Gloria Angeletti

**January 2011 - present** Neuropsychological and behavioral evaluation of neurological and psychiatric patients at Santa Lucia Foundation, Rome, Italy.

**January 2008 - July 2009.** Neuropsychological assessment of neurological patients at Santa Lucia, Rome, Italy.

**December 2004-March 2005:** Diagnosis and rehabilitation of cognitive disorders in patients with neurological diseases (Surgical or hemorrhagic lesions, Alzheimer disease, Parkinson Diseases; Psychological Counseling with patients suffering from heart and lungs pathologies at Institute for hospitalization and health care “Villa Margherita” , Benevento, Italy.

## PUBLICATIONS

1. **Giusy Olivito**, Michela Lupo, Fiorenzo Laghi, Silvia Clausi, Roberto Baiocco, Mara Cercignani, Marco Bozzali, Maria Leggio. Lobular patterns of cerebellar resting-state connectivity in adults with Autism Spectrum Disorder. *Eur J Neurosci*. 2017 Oct 23. doi: 10.1111/ejn.13752.
2. **Giusy Olivito**, Michela Lupo, Claudia Iacobacci Silvia Clausi, Silvia Romano, Marcella Masciullo, Marco Molinari, Mara Cercignani, Marco Bozzali, Maria Leggio. Microstructural MRI basis of the cognitive functions in patients with spinocerebellar ataxia type 2. *Neuroscience*. 2017 Oct 12;366:44-53.
3. Silvia Clausi, Claudia Iacobacci, Michela Lupo, **Giusy Olivito**, Marco Molinari, Maria Leggio. The cerebellar role in unconscious and conscious processing of emotions: a review. *Appl. Sci*. 2017, 7, 521; doi:10.3390/app7050521.
4. **Giusy Olivito**, Emiliano Brunamonti, Silvia Clausi , Pierpaolo Pani, Francesca R. Chiricozzi, Valentina Mione, Margherita Giamundo, Marco Molinari, Maria Leggio, Stefano Ferraina. "Atrophic degeneration of Cerebellum impairs the reactive control of movement in the stop signal paradigm". *Exp Brain Res*. 2017 Jul 17. doi: 10.1007/s00221-017-5027-z.
5. **Giusy Olivito**, Michael Dayan, Valentina Battistoni, Silvia Clausi, Marco Molinari, Maria Leggio, Marco Bozzali. "Bilateral effects of unilateral cerebellar lesions as detected by voxel based morphometry and diffusion imaging". *PLoS One*. 2017 Jul 10;12(7):e0180439.
6. **Giusy Olivito**, Mara Cercignani, Michela Lupo, Claudia Iacobacci, Silvia Clausi, Silvia Romano, Marcella Masciullo, Marco Molinari, Marco Bozzali, Maria Leggio. Neural substrates of motor and cognitive dysfunctions in SCA2 patients: a network based statistics analysis. *Neuroimage Clin*. 2017 Mar 25;14:719-725.
7. **Giusy Olivito**, Maria Leggio, Fiorenzo Laghi , Roberto Baiocco, Silvia Clausi, Anna Maria Tedesco, Chiara Mastropasqua., Marco Molinari, Mara Cercignani, Marco Bozzali. "Altered resting state functional connectivity of dentate nucleus in patients with Autism Spectrum Disorders". *Cerebellum*. 2017 Apr;16(2):283-292.
8. Michael Dayan, **Giusy Olivito**, Marco Molinari, Mara Cercignani, Marco Bozzali, Mara Leggio. Impact of cerebellar atrophy on cortical grey matter and cerebellar peduncles as assessed by voxel based morphometry and high angular resolution diffusion imaging. *Funct Neurol*. 2016 Oct/Dec;31(4):239-248.
9. Emiliano Brunamonti, Francesca R. Chiricozzi, Silvia Clausi, **Giusy Olivito**, Maria Assunta Giusti, Marco Molinari, Stefano Ferraina , Maria Leggio. Cerebellar Damage Impairs Executive Control and Monitoring of Movement Generation. *Plos One*, 2014 , 9 (1): 1-11.
10. Laura Serra, Antonio Petrucci, Barbara Spanò, Mario Torso, **Giusy Olivito**, Ludovico Lispi, Sandro Costanzi-Porrini, Giovanni Giulietti, Giacomo Koch, Manlio Giacanelli, Carlo Caltagirone, Mara Cercignani, Marco Bozzali. "How genetics affects the brain to produce higher level dysfunctions in myotonic dystrophy type 1". *Functional Neurology, Functional Neurology*, 2015, 30 (1):1-11.

## BOOK CHAPTER

11. Maria Leggio, **Giusy Olivito**. Topography of the cerebellum in relationship to social brain regions and emotions. Handbook of Clinical Neurology, Handbook of Clinical Neurology, Elsevier. Volume: The cerebellum in children and adults, Chapter 5. ACCEPTED

## CONFERENCE PROCEEDINGS

12. **Giusy Olivito**, Michael Dayan, Marco Molinari et al. The contribution of cerebellar white matter damage to cortical grey matter: evidence from voxel based morphometry and diffusion imaging. Conference Paper In: Proc Int Soc Mag Res Med, p 1099.
13. **Giusy Olivito**, Maria Leggio, Fiorenzo Laghi , Roberto Baiocco, Silvia Clausi, Anna Maria Tedesco, Chiara Mastropasqua., Marco Molinari, Mara Cercignani, Marco Bozzali. ABSTRACTS SECTION: P13 Resting state functional connectivity of cerebello-cerebral network in patients with Autism Spectrum Disorders. Cerebellum, 2016; 15:67-86.
14. Michael Dayan, **Giusy Olivito**, Marco Molinari et al (2013) Impact of cerebellar atrophy on cortical grey matter and cerebellar peduncles as assessed by voxel based morphometry and diffusion imaging. In:Proc Int Soc Magn Reson Med, p 1014

## POSTERS AND INTERNATIONAL CONFERENCES

**June 2009:** XV National Meeting Of Experimental Psychology (Italian Psychology Association, AIP) Gabriele D'Annunzio University of Chieti-Pescara, Faculty of Psychology. Via dei Vestini 31, 66031, Chieti Italy

**May 2013:** ISMRM, International Society for Magnetic Resonance in Medicine, 21° Annual Meeting & Exhibition, Salt Lake City, Utah, USA.

POSTER: **Giusy Olivito**, Michael Dayan, Valentina Battistoni , Silvia Clausi, Marco Molinari, Maria Leggio, Marco Bozzali. "The contribution of cerebellar white matter damage to cortical grey matter: evidence from voxel based morphometry and diffusion imaging".

POSTER: Michael Dayan, **Giusy Olivito**, Marco Molinari, Mara Cercignani, Marco Bozzali, Mara Leggio. Impact of cerebellar atrophy on cortical grey matter and cerebellar peduncles as assessed by voxel based morphometry and diffusion imaging.

**November 2013:** XLIV National Congress SIN - Società Italiana di Neurologia, Milan, Italy

POSTER: **Giusy Olivito**, Michael Dayan, Valentina Battistoni , Silvia Clausi, Marco Molinari, Maria Leggio, Marco Bozzali. Bilateral effects of unilateral cerebellar lesion as detected by voxel based morphometry and diffusion imaging.

POSTER: **Giusy Olivito**, Marco Bozzali, Marco Molinari, Maria Leggio, Mara Cercignani. Functional connectivity changes as detected by resting state functional MRI: three cases of patients with focal cerebellar lesion.

**September 2013:** 4th meeting- FESN, Federation of European Societies of Neuropsychology, Berlin, Germany

POSTER: **Giusy Olivito**, Michael Dayan, Valentina Battistoni, Silvia Clausi, Marco Molinari, Maria Leggio, Marco Bozzali. Bilateral effects of unilateral cerebellar lesion as detected by voxel based morphometry and diffusion imaging.

POSTER: Silvia Clausi, Claudia Iacobacci, Anna Maria Tedesco, **Giusy Olivito**, Marco Molinari, Maria Leggio. Characterization of executive functions profile in patients with cerebellar damage.

POSTER: Anna Maria Tedesco, Silvia Clausi, **Giusy Olivito**, Marco Molinari, Maria Leggio. Cerebellar Role in social cognition

**May 2014:** ISMRM, International Society for Magnetic Resonance in Medicine

21° Annual Meeting & Exhibition, Milan, 10-16 May 2014.

POSTER: **Giusy Olivito**, Marco Bozzali, Marco Molinari, Maria Leggio, Mara Cercignani. Functional connectivity changes as detected by resting-state functional MRI: three cases of patients with focal cerebellar lesions

**July 2014:** Sixth International Society for Research on Cerebellum (SRC) Congress. "Cerebellar contribution to Brain Function, from Molecules to Behavior". Rome, Santa Lucia Foundation, 3-4 July, 2014

POSTER: **Giusy Olivito**, Michael Dayan, Valentina Battistoni, Silvia Clausi, Marco Molinari, Maria Leggio, Marco Bozzali. Bilateral effects of unilateral cerebellar lesions as detected by voxel based morphometry and diffusion imaging.

**October 2014:** 15th National SIN Congress (Italian Society of Neurology). Cagliari, 11-14 ottobre 2014.

POSTER: **Giusy Olivito**, Maria Leggio, Fiorenzo Laghi, Roberto Baiocco, Silvia Clausi, Anna Maria Tedesco, Chiara Mastropasqua, Marco Molinari, Mara Cercignani, Marco Bozzali. Altered resting state functional connectivity of dentate nucleus in patients with Autism Spectrum Disorders.

**June 2015:** ISMRM, International Society for Magnetic Resonance in Medicine

22° Annual Meeting & Exhibition, Toronto, Ontario, Canada, 30 May-5 June 2015.

ePOSTER: **Giusy Olivito**, Silvia Clausi, Fiorenzo Laghi, Anna Maria Tedesco, Roberto Baiocco, Chiara Mastropasqua, Marco Molinari, Mara Cercignani, Marco Bozzali, Maria Leggio. Functional connectivity changes of Dentate Nucleus in Autism Spectrum Disorders: a resting-state fMRI study.

ePOSTER: Mario Torso, Chiara Mastropasqua, Laura Serra, **Giusy Olivito**, Elisa Tuzzi, Barbara Spanò, Camillo Marra, Carlo Caltagirone, Mara Cercignani, Marco Bozzali. The impact of white matter hyperintensities on brain functional connectivity in a-MCI patients.

**September 2015:** XLVI SIN Conference, Genova

Laura Serra, Vanda Viola, Elisa Tuzzi, Mario Torso, **Giusy Olivito**, Barbara Spanò, Giovanni Giulietti, Camillo Marra, Carlo Caltagirone, Marco Bozzali. Gender-related differences in functional connectivity

Laura Serra, Vanda Viola, Elisa Tuzzi, Mario Torso, Chiara Mastropasqua, **Giusy Olivito**, Barbara Spanò, Giovanni Giulietti, Elena Makovac, Camillo Marra, Carlo Caltagirone, Marco Bozzali. Inter-hemispheric asymmetry and visuospatial deficit in dementia

**September 2015:** European Brain And Behavior Society Meeting, (Ebbs) Verona 2015

POSTER: **Giusy Olivito**, Silvia Clausi, Fiorenzo Laghi, Anna Maria Tedesco, Roberto Baiocco, Chiara Mastropasqua, Marco Molinari, Mara Cercignani, Marco Bozzali, Maria Leggio. Cerebello-cerebral functional connectivity and social behavior in patients with autism spectrum disorders.

**June 2016:** OHBM Annual Meeting, Geneva.

POSTER: **Giusy Olivito**, Silvia Clausi, Fiorenzo Laghi, Anna Maria Tedesco, Roberto Baiocco, Chiara Mastropasqua, Marco Molinari, Mara Cercignani, Marco Bozzali, Maria Leggio. The cerebellar role in social cognition: a resting-state fMRI study in Autism Spectrum Disorders.

**October 2016:** Italian Society of Neurology (SIN) Conference, Venice, Italy.

POSTER PRESENTATION: **Giusy Olivito**, Mara Cercignani, Michela Lupo, Silvia Romano, Marcella Masciullo, Marco Bozzali, Maria Leggio. "Neural substrates of motor and cognitive dysfunctions in SCA2 patients: a network-based statistical analysis"

**October 2016:** Italian Society of Neurology (SIN) Conference, Venice, Italy.

ORAL PRESENTATION: Laura Serra, Giusy Olivito, et al. "Cerebellar involvement in Myotonic dystrophy type-1: a pioneering study".

**January 2017:** Sindem For Juniors , Brixen-Bressanone.

Poster presentation: Giusy Olivito, Laura Serra, Antonio Petrucci, Gabriella Silvestri, Giovanni Meola, Marco Bozzali. Cerebellar microstructural white matter damage in patients with Myotonic Dystrophy type 1.

Poster presentation: Sofia Tonolio, Laura Serra, Giusy Olivito, et al. Pattern of cerebellar grey matter across AD progression.

**March 2017:** SINDEM Conference

Giusy Olivito, Laura Serra, Sofia Tonolio, Camillo Marra, Silvia Romano, Marco Molinari, Maria Leggio, Marco Bozzali. The cerebellar cognitive contribution to Alzheimer Disease.

**September 2017:** The executive function profile in patients with cerebellar pathology. Claudia Iacobacci, Giusy Olivito, Silvia Clausi, Michela Lupo, Anna Maria Tedesco, Fabio Ferlazzo, Marco Molinari and Maria Leggio. CNEF 2017, Padova

## TALKS

**February 2013:** CSAB, Cognitive Science Arena for Beginners, Brixen-Bressanone, BZ

**Giusy Olivito**, Michael Dayan, Valentina Battistoni, Silvia Clausi, Marco Molinari, Maria Leggio, Marco Bozzali. The impact of the cerebellar white matter damage on cortical grey matter: A diffusion imaging study.

**May 2015:** 15th International Meeting of the Society for Research on Cerebellum (SRC).

**Giusy Olivito**, Maria Leggio, Fiorenzo Laghi , Roberto Baiocco, Silvia Clausi, Anna Maria Tedesco, Chiara Mastropasqua., Marco Molinari, Mara Cercignani, Marco Bozzali. Resting State functional connectivity changes of Dentate Nucleus in Autism Spectrum Disorders.

**November 2015:** Italian Society of Neuropsychology (SINP) Conference, Padova

**Giusy Olivito**, Silvia Clausi, Fiorenzo Laghi, Anna Maria Tedesco, Roberto Baiocco, Chiara Mastropasqua, Marco Molinari, Mara Cercignani, Marco Bozzali, Maria Leggio. Relationship between cerebello-cortical connectivity and social behavior in Autism Spectrum Disorders: a resting-state fMRI study.

**December 2015:** XXXII Anniversary of Department of Psychology

**Giusy Olivito:** Application of Structural and Functional MRI to the study of cerebello-cerebral interactions.

Faculty of Medicine and Psychology, Sapienza University of Rome.

**June 2016:** ESCAN Conference, Porto, Portugal.

INVITED SPEAKER for the symposium “ New evidence for cerebellar role in social cognition”. Talk title: Dentate-cerebral functional connectivity and social behavior in patients with autism spectrum disorders.

**January 2017:** Sindem For Juniors, Bressanone Brixen, Bolzano, Italy

**Giusy Olivito**, Laura Serra, Sofia Tonolio, Camillo Marra, Silvia Romano, Marco Molinari, Maria Leggio, Marco Bozzali. The cerebellar cognitive contribution to Alzheimer Disease: a voxel based morphometry study.

**November 2017:** November 2017: IL CONTRIBUTO DELLE PATOLOGIE DEGENERATIVE NELLO STUDIO DEL “CERVELLETTO COGNITIVO”: CORRELATI NEUROPSICOLOGICI E ANATOMO-STRUTTURALI IN PAZIENTI AFFETTI DA SCA2. 2. Giusy Olivito, Michela Lupo, Claudia Iacobacci Silvia Clausi, Silvia Romano, Marcella Masciullo, Marco Molinari, Mara Cercignani, Marco Bozzali, Maria Leggio. SINP (Italian Society of Neuropsychology) Annual Conference, Palermo, Italy.

## REVIEWING

Journals: Cerebellum; Functional Neurology; Neuroimage: Clinical; Brain Research.

## COURSES

**December 2011:** “Forensic Neuropsychology: applications in civil law. Damage to the person and capacity to act”. Prof. Angelo Bianchi.

Campania School of Clinical , Rehabilitative and Forensic Neuropsychology “Lightner Witmer” (SCNp), Via Amerigo Vespucci 9, Naples, Italy

**October 2012:** 1st level course “Safety In Magnetic Resonance Imaging”

Prof. Luigi Indovina. IRCCS, Santa Lucia Foundation, Rome, Italy

**April 2012:** Workshop on “ Transcranial direct current stimulation in neuromotor rehabilitation of patients” Scientific Committee: Prof Alberto Priori; Prof Caterina Pistarini. IRCCS Salvatore Maugeri Foundation, Via S.Maugeri 6, Pavia, Italy



**April 2015:** Participation to workshop. "The images of the Mind. New Frontiers in brain imaging. Advanced (f)MRI statistical methods and their application". University of Milano Bicocca.

**June 2011:** "The statistics in Biomedical research".

Main activities: descriptive, inferential and multidimensional statistics, analyses and discussion of calculations statistics examples with the applications of various software.

European Brain Research Institute, EBRI, Via del Fosso di Fiorano 64, Rome, Italy

## PROFESSIONAL QUALIFICATIONS and PROFESSIONAL BODIES

**October 2010.** State licensing exam for psychology. Rome, Italy.

**March 2016.** State licensing exam for Cognitive-behavioral Psychoterapist. Rome, Italy

## AWARDS

-**Best Oral Communication award**, Sindem for Juniors Conference, 2016, Brixen.Bressanone, Italy. (XI Congress of the Italian Society for Dementia).

-**University Funding for Research** from the Department of Psychology, Faculty of Medicine and Psychology, Rome, Italy, 2015.

## COMPUTER SKILLS

Microsoft Office: Word, Excel, PowerPoint.

Statistical analysis software: SPM, SPSS.

Brain interfaces software: FSL, Mricron, SPM, NBS, Gift, Marsbar.

Experiment presentation software: Matlab

Programming languages: Matlab (basic), BASH (basic), CSH (basic).

Os: Windows, Linux.

## TECHNICAL SKILLS

-Technical and methodological skills for administration of neuropsychological batteries for diagnostic purposes; expertise to practice Cognitive behavioral Therapy in the treatment of psychiatric patients; methodological and research skills on processes that underlying the neurophysiological, neurobiological and neurochemical mechanisms, of normal and pathological cognitive functioning.

-Expertise in the field of neuroimaging and advanced techniques of in vivo brain visualization; acquisition, processing and analyses of functional and structural MRI data : voxel based morphometry, resting state-functional MRI (Independent Component Analysis,ICA; Seed-based Analysis, SBA; Graph Theory), Diffusion tensor Imaging (DTI) , DTI based tractography, Tract-based spatial statistics (TBSS);

Voxel Lesion Symptom Mapping (VLSM). Basic knowledge of transcranial direct current stimulation(tDCS).

## **LANGUAGES**

**Mother language:** Italian

**Others:** English (Advanced)

Spanish (Basic)

## **RESEARCH INTEREST**

- Clinical neuroscience; Neural basis of emotional and cognitive dysregulation in cerebellar patients; Cerebellar focal lesions and Neurodegenerative disorders; cerebello-cerebral circuits in cognition; structural and functional MRI ( resting state fMRI)
- Cerebellar role in social cognition processing and Theory of Mind; Autism Spectrum Disorders; Cerebellum and Psychiatric symptoms in bipolar disorder.
- Neurodegenerative disorders and aging; Microstructural and macrostructural alterations of the cerebellar in Alzheimer Disease and Myotonic Dystrophy. Neuroimaging: DTI and probabilistic tractography, resting-state fMRI, voxel-based morphometry, voxel-lesion symptom mapping.
- Clinical, Neuropsychological and quantitative MRI evaluation of patients affected by Multiple Sclerosis; cerebellum and personality traits in Multiple Sclerosis.
- Behavioural neuroscience; Characterization of Cognitive profiles in neurological patients: memory, language, visuospatial and executive ability.