## Marilina Mastrogiuseppe

# Academic Education and Degrees

## Sep 2018-Sep 2019. Research Fellow - Department of Humanities, University of Trieste, Italy

*Project:* Supporting learning in intellectual disabilities and promoting knowledge accessibility in museums *Advisors:* Elena Bortolotti

Details/Skills:

- Detecting the subjective satisfaction of visitors with intellectual disabilities in museums by capturing their ideas on obstacles/facilitators to knowledge
- Assess the efficacy of programs aimed at simplifying textual resources within museums
- Design quantitative and qualitative studies; collect and analyze data; drafting manuscripts
- Work with interdisciplinary teams (engineers, architects, computer scientists, neuropsychologist).
- Relative Publications: Bortolotti & Mastrogiuseppe, 2019; Tortul, Gubbini, Bortolotti & Mastrogiuseppe, 2019; Mastrogiuseppe, Bortolotti, Gilli, Tortul, 2019; Mastrogiuseppe, Bortolotti & Span, 2020; Mastrogiuseppe & Span, 2020
- Protocol Number: inexistent (motivation: UNITS does not provide this information for this type of contract); the contract has been signed by me and the UNITS Rector (Maurizio Fermeglia) on 2018, September 13.

# May 2017-Feb 2018 and June 2018-Sept 2018. BabyLab Coordinator - Center for Mind/Brain Sciences (CIMeC), Univ. of Trento, Italy

*Project:* Behavioural Correlates of Spatial Representations and Episodic Memory in typical and atypical populations

Responsible: Carlo Miniussi

Details/Skills: After my postdoctoral advisor (Sang Ah Lee) moved to a new institution, I was selected by the Centre for Mind/Brain Sciences as the Coordinator of the Developmental Cognitive Neuroscience Lab. I undertook several responsibilities in making sure that all the ongoing research projects were completed and students graduated successfully. I played an important role in the Laboratory from its initial installation by independently making a range of practical and logistical decisions. I also improved my ability to work collegiately. My role allowed me to recruit subjects, and form collaborations and networks with hospitals, schools, and patient associations

Relative Publications: Mastrogiuseppe, Bertelsen, Bedeschi, Lee, 2019; Mastrogiuseppe, Gianni & Lee, in preparation; Mastrogiuseppe, Lapomarda & Lee, in preparation; Capparini, Mastrogiuseppe & Lee, in preparation

Protocol Number: inexistent (motivation: UNITN does not provide this information for this type of contract); the first contract has been signed by me and the CIMeC Director (Giorgio Vallortigara) on 2015, April 29, its renewal has been signed by me and the new CIMeC Director (Carlo Miniussi) on 2017, April 28.

#### May 2015-May 2017. Research Fellow - Center for Mind/Brain Sciences (CIMeC), Univ. of Trento, Italy

*Project:* Behavioural Correlates of Spatial Representations and Episodic Memory in typical and atypical populations

Advisors: Sang Ah Lee

Details/Skills:

- Conceive and design behavioral and virtual reality tasks to measure episodic and navigation memory in typical development and in clinical populations;
- Use the eye-tracker for research in psychophysics and basic memory processes;
- Create clinical tasks to improve memory abilities in Williams Syndrome and Alzheimer patients in collaboration with other Universities (e.g. Department of Bio and Brain Engineering, Korea Advanced Institute of Science and Technology, Daejeon, Korea);
- Perform clinical duties associated with patients; perform data collection and analysis.
- Relative Publications: *Mastrogiuseppe & Lee, 2017; Mastrogiuseppe, Chukwuemeka Umeh, Lee, 2017*

Protocol Number: inexistent (motivation: UNITN does not provide this information for this type of contract); the first
contract has been signed by me and the CIMeC Director (Giorgio Vallortigara) on 2015, April 29, its renewal has been
signed by me and the new CIMeC Director (Carlo Miniussi) on 2017, April 28.

# Nov 2010 - Dec 2013. PhD in Psychology and Cognitive Sciences - Department of Psychology and Cognitive Sciences (DIPSCO), University of Trento, Italy

*Project:* Gestures in Autism: an investigation on gestural communication in children with ASD during spontaneous mother-child interaction

*Advisors:* Paola Venuti (DIPSCO, University of Trento), Olga Capirci (Institute of Cognitive Sciences and Technologies, CNR, Rome)

Details/Skills:

- Video-coding of spontaneous mother-child interactions in Autism Spectrum Disorders (ASD);
- Designing research and clinical tools to measure social communication abilities in ASD;
- Conducting diagnosis and intervention of children with autism;
- Working in collaboration with schools, hospitals and clinical centers.

Relative Publications: *Mastrogiuseppe et al.*, 2016, 2015; *Mastrogiuseppe*, 2013; *Capirci & Mastrogiuseppe*, 2012; *Cuva & Mastrogiuseppe*, 2012

Protocol Number: inexistent (motivation: UNITN does not provide this information for this type of document); the document related to the final exam has been signed by the UNITN Rector (Daria De Pretis) on 2013, December 10.

# Nov-Dec 2012. Visiting Doctoral Student - Department of Psychology, University of Pittsburgh -

**Pennsylvania** *Advisor:* Jana Iverson (Infant Communication Lab, University of Pittsburgh)

- Investigation of social communication in infant at heightened risk (HR) for autism
- Video-coding of longitudinal data (3-24 months)
- Analysis of a large sample of autistic children with a longitudinal research design

# Feb 2010. Master Degree in Psychology with summa sum laude honors - Department of Developmental Psychology, University of Chieti, Italy Advisor: Tiziana Aureli, co-advisor: Olga Capirci

- Analysis of gestural communication in autism during mother-child interactions
- Longitudinal investigation of clinical interventions aimed at improving socio-communicative skills in autism
- Collaboration with Bambin Gesù Hospital (Dott. Giovanni Valeri, Dott. Simone Cuva)
- Protocol Number: inexistent (motivation: UNITN does not provide this information for this type of document); the document related to the final exam has been signed by the UNICH Dean of Faculty (Ciafardone), by Rector and General Director on 2010, February 02.

# Apr-Sep 2010. Master research project at the Laboratory Gesture, Language and Developmental Disorders (GLADD) Research Unit - Institute of Cognitive Sciences and Technologies, Rome, Italy Advisor: Olga Capirci

- Analysis of gestural communication in autism during mother-child interactions
- Longitudinal investigation of clinical interventions aimed at improving socio-communicative skills in autism
- Collaboration with several hospitals and patient associations

# Jul 2008. Undergraduate Degree in Psychology- Department of Developmental Psychology, University of Chieti, Italy

## **Academic Teaching Experiences/Student Supervision**

**2020.** Adjunct Professor at the Department of Educational Science, University of Pola, Croatia. Course in Psychology for children with developmental impairments, teaching hours: 60 (e-learning methodologies)

**2019.** Adjunct Professor at the Department of Educational Science, University of Trieste, Lead of the Laboratory of developmental psychology, teaching hours: 20

**2019.** Adjunct Professor at the Department of Educational Science, University of Trieste, Lead of the Laboratory of Pedagogy for children with developmental impairments, teaching hours: 20

- **2019.** Adjunct Professor at the Department of Educational Science, University of Pola, Croatia. Course in Pedagogy for children with developmental impairments, teaching hours: 30
- **2015** Adjunct Professor at the Department of Educational Science, University of Ferrara Course in Developmental psychology and observation techniques, ECTS: 6, teaching hours: 48
- **2014** Adjunct Professor at the Department of Educational Science, University of Ferrara Course in Developmental psychology and observation techniques, ECTS: 6, teaching hours: 48
- **2013-2019. Supervised 14 students** in master and bachelor research projects on topics related to developmental psychology and pedagogy in children with neurodevelopmental disorders. Supervision of **2 PhD students**.

## Scholarships, Awards and Honors

- **2015.** Postdoc Mobility Travel Grant at the Technical University of Munich (TUM) for the Research Opportunities Week (ROW): selection of the best 50 young scientists from all over the world
- 2010-2013. Doctoral scholarship, School of Psychology and Cognitive Sciences, University of Trento, Italy
- 2012. Doctoral mobility scholarship, Department of Psychology, University of Pittsburgh, Pennsylvania
- 2014. Excellence Award, Best Paper Italian Association of Cognitive Sciences (AISC) 2014, Deictic Gestures in Children with Autism Spectrum Disorders: a quantitative and qualitative analysis during mother-child interactions
- **2010.** Graduated Master's Degree *summa cum laude*, Department of Developmental Psychology, University of Chieti, Italy

#### Other acknowledgements

**2018**. Admitted to ranking of the call 368.50, strategic area "History, science and technology of knowledge", CNR

**2015-2016.** I have been involved in the writing of two ethics committee projects both of which have been approved

#### **Skills**

**LANGUAGES:** Italian (native speaker), English (highly proficient in spoken and written English), French (very good command)

**PROGRAMMING:** psychophysical presentation packages (Psychtoolbox, Eprime, Opensesame, Ogama), Eye-Tracking, ELAN (Language and gesture annotation software), GSEQ (Analysis of Interaction)

**STATISTICS:** R, SPSS, Prism GraphPad, Virtual Reality Data Analyses. Participation to an International Summer School in Analysis of longitudinal data through Structural Equation Models (Prof. Sonia Ingoglia - University of Chieti)

#### **Clinical Training**

Training course in *Video-feedback Intervention to promote Positive Parenting and Sensitive Discipline (VIPP-SD)* developed by the Centre for Child and Family Studies at Leiden University - Lavinia Barone, University of Pavia

Training course in Autism Diagnostic Observation Schedule (ADOS-2), Clinical Training for assessment and diagnosis of Autism Spectrum Disorders – Antonia Ayala

Training course in *Pivotal Response Training* (PVT) - Robert e Lynn Koegel

Introductory course in *Italian Sign Language (LIS)* – Department of Psychology and Cognitive Science and CIMeC – Rovereto (Italy)

#### Participation to industrial innovation

**2018/2019.** I collaborated to a research project with the University of Trieste fully founded by extramural awards. The project was conducted at the archaeological area of Aquileia, one of the most important in Italy and included in the UNESCO's World Heritage list. By actively involving people with intellectual disabilities in participatory research projects the aim was twofold: (i) investigating participants thoughts on barriers to accessibility and engagement within the communication spaces, (ii) conceiving and designing digital transformations for promoting participation and inclusion.

**2018/2019.** I collaborated to a research project with the University of Trieste fully founded by extramural awards. The project aimed at conceiving and designing a Conversational User Interface voice prototype aimed at facilitating information accessibility for people with intellectual disability in their independent living spaces. Projects in the field have opened a door to collaboration with interdisciplinary teams including engineers, architects, computer scientists, neuropsychologist; as such, they have significant impact in their contribution to knowledge transfer, public engagement, schools, museums and associations outreach.

**2015/2016.** I conceived and designed an adventure game ("KIBU") for 5-to 8 years old children aimed at enhancing cognitive skills across several cognitive domains. The project was conducted in collaboration with the Department of Computer Sciences and the Master in Computer Game Development, University of Verona (Italy) http://www.mastergamedev.it/inside-kibu/, partially financed by a crowdfunding platform and presented through the participation at several conferences related to industrial innovation, technology and cognitive neurosciences.

#### **Publication List**

## Journal Papers - Academic Journals

Mastrogiuseppe M., Span S. (December 2020). Accessibility to cultural heritage: an Inclusive Research project in Intellectual Disabilities, Italian journal of special education for inclusion (In press)

*Mastrogiuseppe M.*, Bortolotti E., Span S. (2020). Improving accessibility to cultural heritage for people with Intellectual Disabilities. A tool for observing the obstacles and facilitators for the access to knowledge. *Alter-European Journal of Disability research*. https://doi.org/10.1016/j.alter.2020.06.016

*Mastrogiuseppe M.*, Bertelsen N., Bedeschi M.F., Lee S.A. (2019), The spatiotemporal organization of episodic memory and its disruption in a neurodevelopmental disorder. *Scientific Reports*, *9*, 18447 doi:10.1038/s41598-019-53823-w.

Bortolotti E. & *Mastrogiuseppe M.* (2019), Accessibility to cultural heritage sites for intellectual disability: methodologies, technologies and adaptive processes ("Accessibilità ai siti culturali per la disabilità intellettiva: metodologie, tecnologie e processi di adattamento"). *Nuova Secondaria, 4*, ISSN 1828-4582.

*Mastrogiuseppe M.*, Lee S.A (2017), What gestures reveal about cognitive deficits in Williams Syndrome, *Developmental Neuropsychology*, 42, 7–8, 470–481 DOI: 10.1080/87565641.2017.1393685

*Mastrogiuseppe M.*, Capirci O., Cuva S., Venuti P. (2016), Deictic gestures in children with Autism Spectrum Disorders: a quantitative and qualitative analysis during mother-child interaction ("I gesti deittici nei bambini con Disturbi dello Spettro Autistico: un'analisi quantitativa e qualitativa all'interno di interazioni spontanee madrebambino"), *Sistemi Intelligenti*, *I*, April, DOI: 10.1422/83833

*Mastrogiuseppe M.*, Capirci O., Cuva S., Venuti P. (2015), Gestural communication in children with Autism Spectrum Disorders during mother-child interaction, *Autism: International Journal of Research and Practice: 1-13*. DOI: 10.1177/1362361314528390

Venuti P., *Mastrogiuseppe M.*, Cuva S. (2012), Communicative skills in children with Autism Spectrum Disorders: from crying to gestural communication ("Le competenze comunicative dei bambini con disturbo dello spettro autistico: dal pianto alla comunicazione gestuale"), *Psichiatria dell'Infanzia e dell'Adolescenza*, vol. 79, 263-277, DOI: 10.1400/214712.

#### Journal Papers - Professional Journals

Cuva S., *Mastrogiuseppe M.* (2012), From deficits to resources: the role of body language in comprehending Autism Spectrum Disorders ("Dal deficit alla risorsa: il ruolo del corpo nella comprensione dell'autismo"), *Psicomotricità*, vol. 16/3.

#### **Books - Short Works**

Capirci O., *Mastrogiuseppe M.* (2012), Imitation and gestures in Autism Spectrum Disorders Intervention ("Imitazione e gesti nel trattamento dell'autismo"). In Venuti P., *Intervento e Riabilitazione nei disturbi dello spettro autistico*, Ed. Carocci

*Mastrogiuseppe M.* (2013), Gestures in Autism: an investigation on gestural communication in children with ASD during spontaneous mother-child interaction, University of Trento [Doctoral thesis].

#### **Conference Contributions – Referred**

Tortul M., Gubbini L., Bortolotti E., *Mastrogiuseppe M.* (2019), The life I wish": the right of a true existence. In "The project for an autonomous and independent life", Anteferma Ed.

*Mastrogiuseppe M.*, Bortolotti E., Gilli R., Tortul M. (2019), Supporting independent life in intellectual disabilities: how technology may help. Proceeding at the International Conference on Education, Research and Innovation ICERI2019. Conference Proceedings Citation Index (Web of Science)

Mastrogiuseppe M., Chukwuemeka Umeh V., Lee S.A (2017), Spatial navigation by boundaries and landmarks in Williams Syndrome in a virtual environment, *Proceedings of Workshops and Posters at 13th International Conference on Spatial Information Theory (COSIT 2017)* 

#### Web sites/Web site design

https://r.unitn.it/en/cimec/scde

### Other

*Mastrogiuseppe M.* (2015), The world needs all kind of minds. Blog jobmetoo.

#### **Conference/Invited Talk Presentations (6 most relevant)**

**Mastrogiuseppe M.,** Bortolotti E. (August, 2019), *Supporting learning in Intellectual Disabilities: accessibilities to textual resources*, 19<sup>th</sup> European Conference on Developmental Psychology, University of Athen, Grece [Peerreviewed Poster presentation]

**Mastrogiuseppe M.,** Bertelsen N., Lee S.A (August, 2017), *Spatio-temporal subcomponents of Episodic Memory in Williams Syndrome*, Poster presentation at International Conference for Cognitive Neurosciences, ICON2017, Amsterdam, Netherlands [Peer-reviewed Poster Presentation]

**Mastrogiuseppe M.,** Lee S.A. (2016), *Spatiotemporal components of Episodic Memory across development*, Talk Presented at XXIX Developmental Psychology and Education Conference, Italian Psychologist Association (AIP), Vicenza, Italy [Peer-reviewed Invited Talk Presentation]

**Mastrogiuseppe M.** (2014), Gestural communication in children with Autism Spectrum Disorders during spontaneous mother-child interactions, Lecture presented at Max Planck Institute for Psycholinguistics, Nijmegen, Holland [Invited Talk].

**Mastrogiuseppe M.,** Capirci O., Cuva S., Venuti P. (2014), *Gestural communication in children with Autism Spectrum Disorders during mother-child interactions*. Talk presented at Body, Tools and Cognition Conference, Italian Association of Cognitive Sciences (AISC), Rome, Italy [Peer-reviewed Talk presentation].

**Mastrogiuseppe M.,** Capirci O., Cuva S., Venuti P. (2014), *Gestural communication in children with Autism Spectrum Disorders during spontaneous mother-child interactions*. Talk presented at Communication and Language Acquisition Studies in Typical and Atypical Populations- CLASTA Conference- University of Bologna [Peer-reviewed Talk presentation].

Rovereto, 2020, August 19