

VALENTINA FOCAROLI

Istituto di Scienze e Tecnologie della Cognizione - Consiglio Nazionale delle Ricerche
(ISTC-CNR)

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Email: valentina.focaroli@istc.cnr.it

Married, 2 children

CURRENT POSITION: **Post-doc Researcher (Assegnista di ricerca) at ISTC-CNR**
SPOON Project “Understanding how complementary feeding method
longitudinally affects developmental outcomes in young children”
(PRIN 2017 – PI Dr. Elsa Addessi); www.progettospoon.com

PREVIOUS POSITION

2018-2020 Research fellow (COCOCO Ricerca) at Laboratory of Developmental Neuroscience -
Università Campus Bio-Medico di Roma.

2016-2018 Post-doc Researcher (Assegnista di Ricerca/M-PSI 04, Psicologia dello Sviluppo e
dell’Educazione) at Laboratory of Developmental Neuroscience - Università Campus
Bio-Medico di Roma.

2011-2016 Research Fellow (COCOPRO Ricerca) at Campus Bio-Medico University of Rome,
Laboratory of Neuroscience of Development, in collaboration with the Laboratory of
Biomedical Robotics and Biomicrosystems

EDUCATION

2016 Professional license to practice in Psychology (Iscrizione all’Ordine degli Psicologi
del Lazio)

- 2015** Ph.D. in Psychology and Cognitive Science at “Sapienza” University of Rome (Italy).
Thesis: “Motor planning ability in children at high and low risk for Autism Spectrum Disorder”. Tutor: Prof. Francesca Bellagamba, Marta Olivetti Belardinelli. Co-tutor: Prof. Jana Marie Iverson, Prof. Flavio Keller, Dr. Elsa Addressi, Prof. Valerio Santangelo.
- 2011** Master’s degree in Developmental Psychology, 110/110 *cum laude* at “Sapienza” University of Rome (Italy). Thesis: “ Performance in intertemporal choice task in capuchin monkeys and preschool children”. Tutor: Prof. Francesca Bellagamba, Dr. Elsa Addressi.

ACADEMIC EXPERIENCE, TEACHING AND TUTORING

- 2020** Research activity within SPOON project (PRIN 2017) about baby led weaning and cognitive development in children between 4 and 24 months of age.
- 2018 to 2020** Research collaboration on projects concerning the development of motor planning in children between 3 and 10 years and on the development of musical perception in early childhood.
- 2016-2018** Post-doc Researcher within a five-year international research project on motor development in children at high and low risk for developing the Autism Spectrum Disorder, entitled "Reaching, posture, object exploration, and language development in children at high and low risk for ASD "(NIH grant to Jana M. Iverson, University of Pittsburgh -R01 HD054979). Supervisors: Prof. Flavio Keller, Prof.ssa. Jana M. Iverson.
- 2014 to 2018** Research activity on a NIH funded project on “reaching, posture, object exploration and language development in children at high and low risk for ASD” at Laboratory of Developmental Neuroscience in collaboration with Laboratory of Biomedical Robotics and Biomicrosystems (UCBM) and with University of Pittsburgh (USA)

2014 to 2016 Teaching collaboration with Prof. Francesca Bellagamba (Developmental Psychology course - Sapienza University)

2014 (October) Visiting period at *Infant Communication Laboratory*, Prof. Jana M. Iverson – University of Pittsburgh (USA)

2012 to 2016 Tutoring research activity, Human Physiology course, Università Campus Bio-Medico

2011-2014 Research activity on NIH project funded on motor skills in children at high risk for ASD (R21 HD068584 to Jana M. Iverson, University of Pittsburgh, USA) at Laboratory of Developmental Neuroscience in collaboration with Laboratory of Biomedical Robotics and Biomicrosystems (UCBM) and with University of Pittsburgh (USA)

2011-2013 Research collaboration in a European Project IM-CLeVer on intrinsic motivation in preschool children (ICT-2007)

2009-2011 Research activity at ISTC-CNR (Rome) in collaboration with Sapienza University of Rome

2007-2008 Internship at ISTC-CNR (Rome)

SCIENTIFIC PUBLICATIONS (as first author)

1. Taffoni, F.*, **Focaroli V.***, Keller, F., Iverson, J.M. (2019). Motor performance in a shape sorter task: a longitudinal study from 14 to 36 months of age in children with an older sibling ASD. *PLOS ONE* 14 (5).
2. **Focaroli, V.**, Iverson, J.M. (2017), Children's Object Manipulation: A Tool for Knowing the External World and for Communicative Development, in Di Stefano N., Bertolaso M. (eds.), *The Hand*, Springer, Cham, pp. 19-27

3. **Focaroli, V.**, Taffoni, F., Parsons, S.M., Keller, F., Iverson, J.M. (2016). Performance of Motor Sequences in Children at Heightened vs. Low Risk for ASD: A Longitudinal Study from 18 to 36 Months of Age. *Frontiers in Psychology*, 7, 724. <http://doi.org/10.3389/fpsyg.2016.00724>
4. **Focaroli, V.**, Taffoni, F., Iverson, J.M. (2015). Abilità di pianificazione motoria nei bambini a sviluppo tipico e con Disturbo dello Spettro Autistico. *Psicologia Clinica dello Sviluppo*, Il Mulino.

SCIENTIFIC PUBLICATIONS (co-authored)

1. Addessi, E., Tierno, V., **Focaroli, V.**, Rossi, F., Gastaldi, S., De Petrillo, F., ... & Stevens, J. R. (2021). Are capuchin monkeys (*Sapajus* spp.) sensitive to lost opportunities? The role of opportunity costs in intertemporal choice. *Philosophical Transactions of the Royal Society B*, 376(1819), 20190674.
2. Taffoni, F., **Focaroli, V.**, Visco, A. M., Noce, F., & Lubrano, R. (2020). New methods and tools to assess nutritive sucking in new-borns: effect of different feeding bottles on nutritive performance. *Journal of Biological Regulators and Homeostatic Agents*, 34(5 Suppl. 3), 137-146.
3. Di Stefano, N., **Focaroli, V.**, Giuliani, A., Taffoni, F., Formica, D., Keller, F. Children playing with sounds: an interactive toy to test consonance and dissonance perception in young children (2017). *Psychology of Music*, Vol. 45, 5, 699-712 (Epub 22 dec 2016).
4. F. Taffoni, L. Di Perna, D. Formica, **V. Focaroli**, F. Keller, N. Di Stefano (2017). A sensor-based approach to study sound perception in children, *International Journal of Computer Application in Technology*.
5. Di Perna, L., Di Stefano, N., Formica, D., **Focaroli, V.**, Taffoni, F. (2016). The sound of actions: A new tool to study music perception in young children. In Engineering in Medicine and Biology Society (EMBC), 2016 *IEEE 38th Annual International Conference* (pp. 2063-2066).

6. Bellagamba, F., Addessi, E., **Focaroli, V.**, Pecora, G., Maggiorelli, V., Pace, B., Paglieri, F. (2015). False belief understanding and “cool” inhibitory control in 3-and 4-year-old Italian children. *Frontiers in Psychology, section Cognitive Science*.
7. Taffoni, F., Tamilia E., **Focaroli, V.**, Formica, D., Ricci, L., Di Pino, G., Baldassarre, G., Mirolli, M., Guglielmelli, E., Keller, F. (2014). Development of goal-directed action selection guided by intrinsic motivations: an experiment with children. *Experimental Brain Research*: 1-11.
8. Taffoni, F., **Focaroli, V.**, Tamilia, E., Keller, F., J.M. Iverson (2014). A Technological Approach to Studying Motor Planning Ability in Children at High Risk for ASD. EMBC Conference paper, 2014.
9. Addessi, E., Bellagamba, F., Delfino, A., De Petrillo, F., **Focaroli, V.**, Macchitella, L., ... & Paglieri, F. (2014). Waiting by mistake: symbolic representation of rewards modulates intertemporal choice in capuchin monkeys, preschool children and adult humans. *Cognition*, 428-441.
10. Paglieri, F., **Focaroli, V.**, Bramlett, J., Tierno, V., McIntyre, J. M., Addessi, E., Evans, T. A., Beran, M. J. (2013). The hybrid delay task: can capuchin monkeys (*Cebus apella*) sustain a delay after an initial choice to do so? *Behavioural Processes*, 94, 45–54.
11. Addessi, E., Paglieri, F., Beran, M. J., Evans, T., Macchitella, L., De Petrillo, F., **Focaroli, V.** (2013). Delay choice versus delay maintenance: different measures of delayed gratification in capuchin monkeys (*Cebus apella*). *Journal of Comparative Psychology*, doi: 10.1037/a0031869.
12. Ventricelli, M., **Focaroli, V.**, De Petrillo, F., Macchitella, Paglieri, F., Addessi, E. (2013). How capuchin monkeys (*Cebus apella*) behaviorally cope with increasing delay in a self-control task. *Behavioural Processes*, 100, 146–152.
13. Taffoni, F., **Focaroli, V.**, Formica, D., Guglielmelli, E., Keller, F., Iverson, J.M. (2012). Sensor-based technology in the study of motor skills in infants at risk for ASD. Biomedical

Robotics and Biomechatronics (BioRob), 2012 4th IEEE RAS & EMBS International Conference, 24-27 Giugno 2012, 1879 – 1883.

14. Addessi, E., Paglieri, F. & **Focaroli, V.** (2011). The ecological rationality of delay tolerance: insights from capuchin monkeys. *Cognition*, 119, 142-147.

SCIENTIFIC CONFERENCES, SPOKEN PRESENTATIONS AND POSTERS

Focaroli V., Paoletti M., Pecora G., Carrillo, M.A., Caravale, B., Gasparini, C., Gastaldi, S., Chiarotti, F., Bellagamba, F., Addessi, E. Allattamento Materno e sviluppo psicomotorio nei bambini di 4 mesi di età. Poster presso il convegno Giornate di Neuropsicologia dell'età evolutiva 2021-XVI edizione, Online 20-23 Gennaio 2021.

Focaroli V., Paoletti, M., Pecora, G., M.A., Caravale, B., Gasparini, C., Gastaldi, S., Chiarotti, F., Bellagamba, F., Addessi, E. Breastfeeding and cognitive development in 4-month-old children. 11th Annual Budapest CEO Conference on Cognitive Development (BCCCD 21) – Virtual – January 4-8, 2021.

Focaroli V., Paoletti M., Pecora G., Carrillo, M.A., Caravale, B., Gasparini, C., Gastaldi, S., Chiarotti, F., Bellagamba, F., Addessi, E. Allattamento Materno e sviluppo psicomotorio nei bambini di 4 mesi di età. Poster presso III Convegno Internazionale Multidisciplinare Brazelton – con i genitori – processi di regolazione reciproca nello sviluppo. Online 17-19 Dicembre 2020.

Roemer E. J., Schneider J. L., **Focaroli V.**, Taffoni F., Keller F., Iverson J. M. Reaching while learning to sit in infants at typical and Elevated Likelihood of Autism. *Virtual Biennial Meeting of the Society for Research in Child Development (SRCD 2021)*, April 7-9 2021.

Di Stefano N., **Focaroli V.**, Curcio G., Nocco A., Taffoni F., Keller F. Studying children's interaction with sounds: Behavioral and EEG results from a consonance vs

dissonance perception study, 15th International Conference on Music Perception and Cognition/10th triennial conference of the European Society for the Cognitive Sciences of Music, 23-28 July, 2018, Graz, La Plata, Montreal, Sydney.

Di Stefano N., **Focaroli V.**, Giuliani A., Formica D., Taffoni F., Keller F. *Children play with music: Results from a consonance versus dissonance perception study*, Conference of the European Society for the Cognitive Sciences of Music (ESCOM), 31 July – 4 August, 2017, Ghent, Belgium.

Di Perna L., Di Stefano N., Formica D., **Focaroli V.**, Taffoni F. The sound of actions: A new tool to study music perception in young children, 38th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC), August 2016, USA.

Focaroli, V., Taffoni, F., Keller, F., Iverson, J.M. Motor planning ability in children at high risk and low risk for ASD. *Annual Conference of Italian Association of Psychology (AIP) section of Developmental Psychology*, Parma 24-26 Sept 2015 (Italy).

Focaroli, V., Taffoni, F., Tamilia, E., Keller, F., Iverson, J.M. Motor planning ability in children at High vs. Low Risk for Autism Spectrum Disorder. *XIX Biennial International Conference on Infant Studies*. Berlin - Jul 2014.

Focaroli, V., Taffoni, F., Tamilia, E., Keller, F., Iverson, J.M. *Motor Planning ability in a manipulation task in typically developing children: preliminary results*. PAED 2013 Conference, Percezione, Azione e Apprendimento in età evolutiva, Rome, 22 November 2013, Università Campus Bio-Medico di Roma.

Focaroli, V., De Petrillo, F., Macchitella, Addessi, E., Paglieri, F. Il compito di scelta intertemporale misura la capacità di ritardare la gratificazione? Uno studio sperimentale nel cebo dai cornetti (*sapajus spp*), una scimmia sudamericana. *XXVI Annual Congress of the Italian Association of Psychology, Developmental Psychology section*, Milan 19 - 21 Settembre 2013.

Focaroli, V., De Petrillo, F., Macchitella, L., Maggiorelli, V., Pace, Pecora, G., Rossi, S., Bellagamba, F., Addessi, E., Paglieri, F. Il ruolo dei *token* nelle scelte temporali dei cebi (*Cebus apella*) e nei bambini in età prescolare. CODISCO Conference, 24-26 Settembre 2012, Rome.

Focaroli, V., Pecora, G., Delfino, A., De Petrillo, F., Macchitella, L., Maggiorelli, V., Pace, B., Rossi, S., Sbaffi, A., Tasselli, I., Bellagamba, F., Addessi, E., Paglieri, F. The role of tokens in intertemporal choice in capuchins (*Cebus apella*), prechool children and adult humans. *Intertemporal Day*, Workshop, May 29 2012, ISTC-CNR, Rome.

Addessi, E., Bellagamba, F., Paglieri, F., **Focaroli, V.**, Maggiorelli, V., Pecora, G. & Pace, B. Are you greedy or impatient? Effect of reward type on intertemporal choice in preschool children. Poster, *XV European Conference on Developmental Psychology*, Bergen (Norway), 23-27 Aug 2011.

Focaroli, V., De petrillo, F., Paglieri, F. & Addessi, E. Why capuchin monkeys (*Cebus apella*) have the patience of saint? A comparative analysis of five primate species' performance in the intertemporal choice task. Oral presentation at *XX Conference of Italian Association of Primatology*, Bussolengo (Italy), 10-13 April 2011.

Bellagamba, F., Addessi, E., **Focaroli, V.**, Maggiorelli, V. & Visalberghi, E. Capacità di inibizione e autocontrollo in età prescolare (*Inhibition and self-control in preschool children*). Poster presentation at the *Annual Congress of the Italian Association of Psychology, Developmental Psychology section (AIP)*, Bressanone (Italy).

Addessi, E., Paglieri, F., **Focaroli, V.** & Visalberghi, E. *An egg today? Or a hen tomorrow? Delay discounting for primary and secondary rewards in capuchin monkeys. XXIII Conference of the International Primatological Society*, Kyoto, 12-18/9/2010.

Addressi, E., Paglieri, F. & **Focaroli, V.** *A comparative perspective on delay discounting: from capuchin monkeys to other primate species. V European Conference on Behavioural Biology (ECBB), Ferrara 16-18/7/2010.*

COLLABORATION TO NATIONAL AND INTERNATIONAL PROJECTS

SPOON Project (PRIN 2017)

NIH Project R01 (R01 HD054979)

NIH project R21 (R21 HD068584)

MEDIA Project “Music: EmboDiment In Action”. Funded by Università Campus Bio-Medico.
Total budget Euro 12.712”. Role: Co-PI

EU Project IM Clever (ICT 2007)

MEMBERSHIP OF SCIENTIFIC SOCIETIES:

AIP - Associazione Italiana di Psicologia (Sezione Sviluppo ed Educazione)

LANGUAGE SKILLS

MOTHER TONGUE: ITALIAN

OTHER LANGUAGES: ENGLISH (FLUENT)