Alessandro Moscatelli

Informazioni Personali

Nato a Roma il 23 Ottobre 1981
Tel (Ufficio): +39 0651501470
E-mail: alessandro.moscatelli@uniroma2.it
Web: https://moskante.github.io/biosketch/biosketch.html
ORCID: 0000-0001-6269-4536
ResearcherID: L-1391-2018

Istruzione e Formazione

Università degli Studi di Roma "Tor Vergata", Roma, Italia

Laurea in Medicina e Chirurgia, Luglio 2006
Tesi:"Le Basi Neurali della Percezione dell'Accelerazione di Gravità: Studio di Risonanza Magnetica Funzionale "
Supervisore: Prof. Francesco Lacquaniti
Voto: 110 e lode

Master di II Livello in Biostatistica, Settembre 2009
Tesi: "Mixed Models in Psychophysics: Estimates from Bootstrap and Delta Methods"
Supervisore: Prof.ssa Maura Mezzetti
Voto: 110 e lode

Dottorato in Neuroscienze, Novembre 2011
Tesi: "Behavioral Studies on the Perception of Time"
Supervisore: Prof. Francesco Lacquaniti

Posizione attuale

Università degli Studi di Roma "Tor Vergata" **2022–Oggi**
Professore Associato presso Dipartimento
di Medicina dei Sistemi, settore scientifico disciplinare BIO/09 (Fisiologia)
Università degli Studi di Roma "Tor Vergata", Roma, Italia.

Posizioni ricoperte

Università degli Studi di Roma "Tor Vergata" **2019–2022**
Ricercatore a tempo determinato (RTD-B) presso Dipartimento
di Medicina dei Sistemi, settore scientifico disciplinare BIO/09 (Fisiologia)
Università degli Studi di Roma "Tor Vergata", Roma, Italia.

Università degli Studi di Roma "Tor Vergata" **2017–2019**
Ricercatore a tempo determinato (RTD-A) presso Dipartimento
di Medicina dei Sistemi, settore scientifico disciplinare BIO/09 (Fisiologia)
Università degli Studi di Roma "Tor Vergata", Roma, Italia.

Università degli Studi di Roma "Tor Vergata" **2015–2017**
Assegnista di Ricerca presso il Centro di Biomedicina Spaziale,
Università degli Studi di Roma "Tor Vergata", Roma, Italia.
Presso il gruppo guidato dal Prof. Francesco Lacquaniti

Bielefeld University **2011–2015**
Wissenschaftlicher Beschäftigter (post-doc) presso
Department of Cognitive Neuroscience and Cognitive Interaction Technology–Centre of Excellence,
Bielefeld University, Bielefeld, Germany.

Presso il gruppo guidato dal Prof. Marc O. Ernst

Università degli Studi di Roma "Tor Vergata" **2011**
Assegnista di Ricerca presso il Dipartimento di Neuroscienze,
Università degli Studi di Roma "Tor Vergata", Roma, Italia.
Presso il gruppo guidato dal Prof. Francesco Lacquaniti

Università degli Studi di Roma "Tor Vergata" **2008–2010**
Borsa di Dottorato presso il Dipartimento di Neuroscienze,
Università degli Studi di Roma "Tor Vergata", Roma, Italia.

IRCCS Fondazione Santa Lucia **2007**
Borsa di Studio presso il Dipartimento di Fisiologia Neuromotoria,
IRCSS Fondazione Santa Lucia, Roma, Italia.

Membro di Società Scientifiche Internazionali

EuroHaptics Society **2014–Oggi**
Membro dal 2014 ad oggi. Dal 2018 eletto *Member of Executive Committee*
`https://eurohaptics.org/`

Societ Italiana di Fisiolgia - SIF **2024–Oggi**
`https://fisiologiaitaliana.org/`

Istituto di Robotica e Macchine Intelligenti (I-RIM) **2019–2020**
`https://i-rim.it/`

Association for Computing Machinery (ACM) **2020–2021**
`https://www.acm.org/`

The American Physiological Society **2015**
`https://www.the-aps.org/`

Abilitazioni

Abilitazione Scientifica Nazionale per professore di I fascia,
settore concorsuale 05/D1 – Fisiologia.
VALIDO DAL 11/2023 AL 11/2033.

Abilitazione Scientifica Nazionale per professore di II fascia,
settore concorsuale 05/D1 – Fisiologia.
VALIDO DAL 25/07/2017 AL 25/07/2023.

Abilitazione Scientifica Nazionale per professore di II fascia,
settore concorsuale 11/E1 – Psicologia Generale
VALIDO DAL 11/04/2018 AL 11/04/2024.

Iscrizione all'Ordine dei Medici di Roma il 13 Marzo 2007.

Riconoscimenti e Premi

Premio "Sebastiano e Rita Raeli" per meriti negli studi, 2007

EuroHaptics Conference 2014, Versailles (France)
Best paper award: **A. Moscatelli**, M. Bianchi, A. Serio, O. Al Atassi, S. Fani, A. Terekhov, V. Hayward, M.O. Ernst, and A. Bicchi for the poster entitled "A Change in The Fingertip Contact Area Induces An Illusory Displacement of The Finger".
`https://eurohaptics.org/static/2014/node/39.html`

Research Grants

2024 - 2026 PRIN: PROGETTI DI RICERCA DI RILEVANTE INTERESSE NAZIONALE. Titolo del Progetto "COordination and iNtegration of motion in the TACTile and motor system - CONTACT". Settore SH4; Codice Progetto 2020EL3FZL. Responsabile del'Unità di Ricerca Dipartimento di Medicina dei Sistemi, Università degli Studi di Roma "Tor Vergata".

(Awarded on March 2022)
Team Leader (Haptic Team - Santa Lucia Foundation Unit) in Horizon RIA grant: "HARIA HUMAN-ROBOT SENSORIMOTOR AUGMENTATION WEARABLE SENSORIMOTOR INTERFACES" (Proposal number: 101070292).

(Awarded on March 2022)
Co-Investigator in project "LATIN: Locomotion in Ataxia and modulation by Tactile vibratIoN". University of Rome Tor Vergata (Rome, Italy)".

2021 - 2022
Principal Investigator in project "MOPED: Multisensory mOtion PErception" and pathological changes in Diabetes. University of Rome Tor Vergata (Rome, Italy), research program "Beyond Borders".

2020 - July PRIN: PROGETTI DI RICERCA DI RILEVANTE INTERESSE NAZIONALE. Titolo del Progetto "TIGHT: Tactile InteGration for Humans and arTificial systems". Settore PE7; Codice Progetto 2017SB48FP. Responsabile del'Unità di Ricerca Dipartimento di Medicina dei Sistemi, Università degli Studi di Roma "Tor Vergata".

2017 - 2019
Research Agreement with *Facebook Reality Lab (Facebook, Inc.)*. The research project has a duration of 2+1 years. In collaboration with Centro Piaggio, University of Pisa. Role of Principal Investigator for the unit IRCCS Santa Lucia Foundation.

2013 - 2017
Co-investigator in European project "WEARHAP WEARable HAPtics for humans and robots". The project has received funding from the European Union Seventh Framework Programme FP7/2007-2013 under grant agreement 601165. Information and Communication Technologies, Collaborative Large-scale integrating project (IP), FP7-ICT-2011-9-2.1: Cognitive Systems and Robotics. Coordinator: Prof. Domenico Prattichizzo

October, 2011 - June, 2014
Co-investigator in European Project "THE - The Hand Embodied". A project supported by the European Commission under the 7th Framework Programme Large-scale integrating project Information and Communication Technologies ICT Supported by the ICT Programme Cognitive Systems and Robotics. Coordinator: Prof. Antonio Bicchi

Attività Didattica

Università degli Studi di Roma "Tor Vergata" **2015–Oggi**

Corso di Fisiologia, corso di laurea in "Odontoiatria e Protesi Dentaria". Argomenti trattati: Fisiologia Cellulare, Neurofisiologia, Fisiologia Orale.

Modulo di Neurofisiologia nell'ambito dell'insegnamento di "Physiology" del corso di laurea in lingua inglese"Medicine and Surgery". Argomenti trattati: Fisiologia Cellulare, Sistemi Sensoriali, Sistema Motorio.

Modulo di Neurofisiologia nell'ambito dell'insegnamento di "Fisiologia" del corso di laurea "Medicina e Chirurgia". Argomenti trattati: Sistema Motorio.

Corso di Fisiologia per i seguenti corsi di Laurea triennale: Fisioterapia, Podologia, Ortottica ed assistenza oftalmologica, Terapia della neuro e psicomotricita dell'eta evolutiva, Tecniche della riabilitazione psichiatrica, Tecniche di Neurofisiopatologia

Supervisore per dottorato di: Colleen P. Ryan; Dottorato in Neuroscienze presso Università degli Studi di Roma "Tor Vergata" (attualmente al secondo anno di corso).

Supervisore per tesi di laurea di: Colleen P. Ryan; corso di laurea "Medicine and Surgery" presso Università degli Studi di Roma "Tor Vergata"; discussione in data 25 Ottobre 2019;

Supervisore per tesi di laurea come relatore esterno di: Lucia Cosentino; corso di Laurea Magistrale in Ingegneria Gestionale e dell'Automazione presso Università degli Studi di Roma Tre; A.A. 2017/2018.

University of Bielefeld **2011–2015**
Assistente alla Didattica
Faculty of Biology; Project Module "Touch and Audition".

Supervisore per tesi di laurea o progetto di ricerca: Chris Dallmann, M.Sc., Meike Scheller, M.Sc, Gabriele J. Kowalsky, M.Sc., Shirley Mey, M.Sc., Sven Bergfeld, Janina Röckner.

Competenza in Biostatistica

Conoscenza approfondita di probabilità e statistica per analisi dei dati biomedici, in particolare modelli per dati categoriali, modelli Bayesiani e "Mixed Models". Autore del programma in R per analisi statistica in psicofisica, *MixedPsy*. Disponile sul sito web CRAN:
`https://cran.r-project.org/web/packages/MixedPsy/index.html`

Attività di Consulenza

a.a. 2012–2013
Consulente scientifico presso la Banca Centrale Europea.

Pubblicazioni Scientifiche su riviste con Peer Review

Ballanti M, Antonetti L, Mavilio M, Casagrande V, Moscatelli A, Pietrucci D, Teofani A, Intern C, Cardellini M, Paoluzi O, Monteleone G, Lefebvre P, Staels B, Mingrone G, Menghini R, Federici M. Decreased circulating IPA levels identify subjects with metabolic comorbidities: A multi-omics study. Pharmacol Res. 2024 Jun;204:107207. doi: 10.1016/j.phrs.2024.107207. Epub 2024 May 9. PMID: 38734193.

Ryan CP, Ciotti S, Balestrucci P, Bicchi A, Lacquaniti F, Bianchi M, Moscatelli A. (2024). The Relativity of Reaching: Motion of the touched surface alters the trajectory of hand movements. iScience.

Pra Y, Catrambone V, Wassenhove VV, Moscatelli A, Valenza G, Bianchi M. Investigating the Kappa Effect Elicited Through Concurrent Visual and Tactile Stimulation. IEEE Trans Haptics. 2024 Oct 17;PP. doi: 10.1109/TOH.2024.3482570. Epub ahead of print. PMID: 39418150.

Marucci M, Maddaluno O, Ryan CP, Perciballi C, Vasta S, Ciotti S, Moscatelli A, Betti V. Rewiring the evolution of the human hand: How the embodiment of a virtual bionic tool improves behavior. iScience. 2024 Jun 6;27(6):109937. doi: 10.1016/j.isci.2024.109937. PMID: 39055602; PMCID: PMC11270032.

D'Aurizio N, Ramundo T, Baldi TL, Moscatelli A, Prattichizzo D. On the Correlation Between Tactile Stimulation and Pleasantness. IEEE Trans Haptics. 2023 Oct 6;PP. doi: 10.1109/TOH.2023.3322557. Epub ahead of print. PMID: 37801384.

Seminara L, Dosen S, Mastrogiovanni F, Bianchi M, Watt S, Beckerle P, Nanayakkara T, Drewing K, Moscatelli A, Klatzky RL, Loeb GE. A hierarchical sensorimotor control framework for human-in-the-loop robotic hands. Sci Robot. 2023 May 17;8(78):eadd5434. doi: 10.1126/scirobotics.add5434. Epub 2023 May 17. PMID: 37196072.

Fani S, Ciotti S, Pagnanelli G, Moscatelli A, De Pra Y, Bianchi M. Modulating the Perceived Softness of Real Objects Through Wearable Feel-Through Haptics. IEEE Trans Haptics. 2023 May 3;PP. doi: 10.1109/TOH.2023.3271825. Epub ahead of print. PMID: 37134036.

Pra Y, Catrambone V, van Wassenhove V, Moscatelli A, Valenza G, Bianchi M. Altering Time Perception in Virtual Reality through Multimodal Visual-tactile Kappa Effect. IEEE Trans Haptics. 2023 Apr 26;PP. doi: 10.1109/TOH.2023.3270639. Epub ahead of print. PMID: 37099460.

Mezzetti M, Ryan CP, Balestrucci P, Lacquaniti F, Moscatelli A. Bayesian hierarchical models and prior elicitation for fitting psychometric functions. Front Comput Neurosci. 2023 Mar 2;17:1108311. doi: 10.3389/fncom.2023.1108311. PMID: 36936193; PMCID: PMC10018033.

Ryan CP, Ciotti S, Cosentino L, Ernst MO, Lacquaniti F, Moscatelli A. Masking Vibrations and Contact Force Affect the Discrimination of Slip Motion Speed in Touch. IEEE Trans Haptics. 2022 Oct-Dec;15(4):693-704. doi: 10.1109/TOH.2022.3209072. Epub 2022 Dec 19. PMID: 36149999.

Picconi F, Ryan CP, Russo B, Ciotti S, Pepe A, Menduni M, Lacquaniti F, Frontoni S, **Moscatelli, A.** The evaluation of tactile dysfunction in the hand in type 1 diabetes: a novel method based on haptics. Acta Diabetol. 2022 Aug;59(8):1073-1082. doi: 10.1007/s00592-022-01903-1. Epub 2022 May 31. PMID: 35641837; PMCID: PMC9242965.

Gilio L, Fresegna D, Gentile A, Guadalupi L, Sanna K, De Vito F, Balletta S, Caioli S, Rizzo FR, Musella A, Iezzi E, Moscatelli A, Galifi G, Fantozzi R, Bellantonio P, Furlan R, Finardi A, Vanni V, Dolcetti E, Bruno A, Buttari F, Mandolesi G, Centonze D, Stampanoni Bassi M. Preventive exercise attenuates IL-2-driven mood disorders in multiple sclerosis. Neurobiol Dis. 2022 Oct 1;172:105817. doi: 10.1016/j.nbd.2022.105817. Epub 2022 Jul 11. PMID: 35835361.

Bruno A, Dolcetti E, Azzolini F, Moscatelli A, Gambardella S, Ferese R, Rizzo FR, Gilio L, Iezzi E, Galifi G, Borrelli A, Buttari F, Furlan R, Finardi A, De Vito F, Musella A, Guadalupi L, Mandolesi G, Centonze D, Stampanoni Bassi M. Interleukin 6 SNP rs1818879 Regulates Radiological and Inflammatory Activity in Multiple Sclerosis. Genes (Basel). 2022 May 17;13(5):897. doi: 10.3390/genes13050897. PMID: 35627281; PMCID: PMC9141517.

Ciotti S., Bianchi M., Doria D., Lacquaniti F., **Moscatelli, A.** . (2022) HaptiTrack: A Novel Device for the Evaluation of Tactile Sensitivity in Active and in Passive Tasks. In: Torricelli D., Akay M., Pons J.L. (eds) Converging Clinical and Engineering Research on Neurorehabilitation IV. ICNR 2020. Biosystems and Biorobotics, vol 28. Springer, Cham.

Ryan CP, Bettelani GC, Ciotti S, Parise C, **Moscatelli, A.** , Bianchi M. The interaction between motion and texture in the sense of touch. J Neurophysiol. 2021 Oct 1;126(4):1375-1390. doi: 10.1152/jn.00583.2020. Epub 2021 Sep 8. PMID: 34495782.

G. C. Bettelani, S. Fani, **Moscatelli, A.** , P. Salaris and M. Bianchi, "Controlling Hand Movements Relying on Tactile Illusions: A Model Predictive Control Framework," 2021 IEEE World Haptics Conference (WHC), 2021, pp. 985-990, doi: 10.1109/WHC49131.2021.9517188.

S. Ciotti, C. P. Ryan, M. Bianchi, F. Lacquaniti and **Moscatelli, A.**, "A Novel Device Decoupling Tactile Slip and Hand Motion in Reaching Tasks: The HaptiTrack Device," in IEEE Transactions on Haptics, vol. 14, no. 2, pp. 248-253, 1 April-June 2021, doi: 10.1109/TOH.2021.3075024.

Moscatelli, A. , Nimbi FM, Ciotti S, Jannini EA. Haptic and Somesthetic Communication in Sexual Medicine. Sex Med Rev. 2021 Apr;9(2):267-279. doi: 10.1016/j.sxmr.2020.02.003. Epub 2020 Jul 18. PMID: 32690471.

Scotto CR, **Moscatelli, A.** , Pfeiffer T, Ernst MO. Visual pursuit biases tactile velocity perception. J Neurophysiol. 2021 Aug 1;126(2):540-549. doi: 10.1152/jn.00541.2020. Epub 2021 Jul 14. PMID: 34259048.

Naceri A, Gultekin YB, **Moscatelli, A.** , Ernst MO. Role of Tactile Noise in the Control of Digit Normal Force. Front Psychol. 2021 Feb 12;12:612558. doi: 10.3389/fpsyg.2021.612558. PMID: 33643139; PMCID: PMC7907510.

Balestrucci P, Maffei V, Lacquaniti F, **Moscatelli, A.** . The Effects of Visual Parabolic Motion on the Subjective Vertical and on Interception. Neuroscience. 2021 Jan 15;453:124-137. doi: 10.1016/j.neuroscience.2020.09.052. Epub 2020 Oct 1. PMID: 33010347.

Stampanoni Bassi M, Gilio L, Iezzi E, **Moscatelli, A.** , Pekmezovic T, Drulovic J, Furlan R, Finardi A, Mandolesi G, Musella A, Galifi G, Fantozzi R, Bellantonio P, Storto M, Centonze D, Buttari F. Age at Disease Onset Associates With Oxidative Stress, Neuroinflammation, and Impaired Synaptic Plasticity in Relapsing-Remitting Multiple Sclerosis. Front Aging Neurosci. 2021 Sep 10;13:694651. doi: 10.3389/fnagi.2021.694651. PMID: 34566620; PMCID: PMC8461180.

Mandolesi G, Rizzo FR, Balletta S, Stampanoni Bassi M, Gilio L, Guadalupi L, Nencini M, **Moscatelli, A.** , Ryan CP, Licursi V, Dolcetti E, Musella A, Gentile A, Fresegna D, Bullitta S, Caioli S, Vanni V, Sanna K, Bruno A, Buttari F, Castelli C, Presutti C, De Santa F, Finardi A, Furlan R, Centonze D, De Vito F. The microRNA let-7b-5p Is Negatively Associated with Inflammation and Disease Severity in Multiple Sclerosis. Cells. 2021 Feb 5;10(2):330. doi: 10.3390/cells10020330. PMID: 33562569; PMCID: PMC7915741.

Bettelani, G. C., **Moscatelli, A.** , Bianchi, M. (2020). On the Role of Lateral Force in Texture-Induced Motion Bias During Reaching Tasks. IEEE Transactions on Haptics (ePub ahead of print).

Moscatelli, A., Bianchi, M., Ciotti, S., Bettelani, G.C., Parise, C.V., Lacquaniti, F., Bicchi, A. (2019). Touch as an auxiliary proprioceptive cue for movement control. Science Advances, 5(6), eaaw3121. Impact Factor: 11.511

Moscatelli A., Scotto C.R., Ernst M.O. (2019) Illusory changes in the perceived speed of motion derived from proprioception and touch. Journal of Neurophysiology, 122(4):1555–1565. doi: 10.1152/jn.00719.2018. Impact Factor: 2.887

Moscatelli, A., La Scaleia, B., Zago, M., Lacquaniti, F.(2019). Motion direction, luminance contrast and speed perception: An unexpected meeting. Journal of Vision, 19(6):16. doi: 10.1167/19.6.16 Impact Factor: 2.089

Bettelani, G. C., **Moscatelli, A.**, Bianchi, M. (2019). Contact with Sliding over a Rotating Ridged Surface: the Turntable Illusion. 2019 IEEE World Haptics Conference (WHC), pp. 562–567. doi: 10.1109/WHC.2019.8816119

Bettelani, G.C. , **Moscatelli A.**, Bianchi M. (2018). Towards a Technology-Based Assessment of Sensory-Motor Pathological States Through Tactile Illusion. 7th IEEE International Conference on Biomedical Robotics and Biomechatronics (Biorob), Enschede, Netherlands, 2018, pp. 225–229. doi: 10.1109/BIOROB.2018.8487623

Ceccarelli, F., La Scaleia, B., Russo, M., Cesqui, B., Gravano, S., Mezzetti, M., **Moscatelli, A.**, d'Avella, A., Lacquaniti, F., Zago, M. (2018). Rolling Motion Along an Incline: Visual Sensitivity to the Relation Between Acceleration and Slope. Frontiers in Neuroscience, 12, 406. http://doi.org/10.3389/fnins.2018.00406 Impact Factor: 3.648

Fani, S., Ciotti, S., Battaglia, E., **Moscatelli, A.**, Bianchi, M. (2018). W-FYD: a Wearable Fabric-based Display for Haptic Multi-Cue Delivery and Tactile Augmented Reality. IEEE Transactions on Haptics, 11(2):304–316. doi: 10.1109/TOH.2017.2708717. Impact Factor: 2.757

Russo, M., Cesqui, B., La Scaleia, B., Ceccarelli, F., Maselli, A., **Moscatelli, A.**, Zago, M. , Lacquaniti, F., d'Avella, A. (2017). Intercepting virtual balls approaching under different gravity conditions: evidence for spatial prediction. Journal of Neurophysiology, 118(4):2421–2434. doi: 10.1152/jn.00025.2017 Impact Factor: 2.887

Bianchi, M., **Moscatelli, A.**, Ciotti, S., Bettelani, G. C., Fioretti, F., Lacquaniti, F., Bicchi, A. (2017). Tactile Slip and Hand Displacement: Bending Hand Motion with Tactile Illusions. In World Haptics Conference (WHC), 2017 (pp. 96–100).

Naceri, A., **Moscatelli, A.**, Haschke, R., Ritter, H., Santello, M., Ernst, M. O. (2017). Multi-digit force control during unconstrained grasping in response to object perturbations. Journal of Neurophysiology, 117(5):2025-2036. http://doi.org/10.1152/jn.00546.2016 Impact Factor: 2.887

Moscatelli, A., Bianchi, M., Serio, A., Terekhov, A., Hayward, V., Ernst, M. O., Bicchi, A. (2016) The Change in Fingertip Contact Area as a Novel Proprioceptive Cue. Current Biology, 26, 1159-1163. http://dx.doi.org/10.1016/j.cub.2016.02.052 Impact Factor: 9.193

Santello, M., Bianchi, M., Gabiccini, M., Ricciardi, E., Salvietti, G., Prattichizzo, D., Ernst, M. O., **Moscatelli, A.**, Jörntell, H., Kappers, A., Kyriakopoulos, K., Castellini, C., Bicchi, A. (2016) Towards a synergy framework across neuroscience and robotics: Lessons learned and open questions. Reply to comments on: "Hand synergies: Integration of robotics and neuroscience for understanding the control of biological and artificial hands" Physics of Life Reviews, 17, 54-60. http://dx.doi.org/10.1016/j.plrev.2016.06.007 Impact Factor: 11.045

Santello, M., Bianchi, M., Gabiccini, M., Ricciardi, E., Salvietti, G., Prattichizzo, D., Ernst, M. O., **Moscatelli, A.**, Jörntell, H., Kappers, A., Kyriakopoulos, K., Castellini, C., Bicchi, A. (2016) Hand synergies: Integration of robotics and neuroscience for understanding the control of biological and artificial hands. Physics of Life Reviews, 17, 1-23. http://doi.org/10.1016/j.plrev.2016.02.001 Impact Factor: 11.045

Jetzschke, S., Ernst, M. O., **Moscatelli, A.**, and Böddeker, N. (2016). Going round the bend: Persistent personal biases in walked angles. Neuroscience Letters.
http://doi.org/dx.doi.org/10.1016/j.neulet.2016.01.026 Impact Factor: 2.173

Soltoggio A., Bläsing B., **Moscatelli A.**, Schack T. (2016) The Aikido inspiration to safety and efficiency: an investigation on forward roll impact forces. In Advances in Intelligent Systems and Computing, eds. P. Chung, A. Soltoggio, C.W. Dawson, Q. Meng, M. Pain (Springer Berlin Heidelberg), 119-127.

Dallmann, C.J., Ernst, M.O., **Moscatelli, A.** (2015) The role of vibration in tactile speed perception. Journal of Neurophysiology, 114(6), 3131-3139. http://doi.org/10.1152/jn.00621.2015 Impact Factor: 2.887

Moscatelli, A., Hayward, V., Wexler, M., Ernst, M.O. (2015) Illusory Tactile Motion Perception: An Analog of the Visual Filehne Illusion. Scientific Reports, 5:14584, 1-12. doi: 10.1038/srep14584 Impact Factor: 4.525

Naceri, A., **Moscatelli, A.**, Chellali, R. (2015) Depth discrimination of constant angular size stimuli in action space: role of accommodation and convergence cues. Frontiers in Human Neuroscience 9:511, 1-8. doi: 10.3389/fnhum.2015.00511 Impact Factor: 2.870

La Scaleia, B., Zago, M., **Moscatelli, A.**, Lacquaniti, F., and Viviani, P. (2014). Implied dynamics biases the visual perception of velocity. PLoS One 9:3, e93020, 1-15. Impact Factor: 2.776

Lacquaniti, F., Carrozzo, M., Andrea d'Avella, La Scaleia, B., **Moscatelli, A.**, and Zago, M. (2014). How long did it last? You would better ask a human. Frontiers in Neurorobotics 8:2, 1-12. Impact Factor: 3.000

Moscatelli, A., Naceri, A., and Ernst, M.O. (2014). Path integration in tactile perception of shapes. Behavioural Brain Research 274, 355-364. Impact Factor: 2.770

Moscatelli, A., Bianchi, M., Serio, A., Atassi, O. Al, Fani, S., Terekhov, A., Hayward, V., Ernst, M.O., and Bicchi, A. (2014). A change in the fingertip contact area induces an illusory displacement of the finger, in Haptics: Neuroscience, Devices, Modeling, and Applications, eds. M. Auvray and C. Duriez (Springer Berlin Heidelberg), 72-79. **Best Paper Award**

Moscatelli, A., Scheller, M., Kowalski, G. J., and Ernst, M.O. (2014). The Haptic Analog of the Visual Aubert-Fleischl Phenomenon, in Haptics: Neuroscience, Devices, Modeling, and Applications, eds. M. Auvray and C. Duriez (Springer Berlin Heidelberg), 34-40.

Naceri, A., **Moscatelli, A.**, Santello, M., and Ernst, M.O. (2014). Multi-digit Position and Force Coordination in Three- and Four-Digit Grasping. In Haptics: Neuroscience, Devices, Modeling, and Applications, eds. M. Auvray and C. Duriez (Springer Berlin Heidelberg), 101-108.

Naceri, A., **Moscatelli, A.**, Santello, M., and Ernst, M.O. (2014). Coordination of multi-digit positions and forces during unconstrained grasping in response to object perturbations. 2014 IEEE Haptics Symposium, 35-40.

Rossi, S., Studer, V., **Moscatelli, A.**, Motta, C., Coghe, G., Fenu, G., Caillier, S., Buttari, F., Mori, F., Barbieri, F., et al. (2013). Opposite Roles of NMDA Receptors in Relapsing and Primary Progressive Multiple Sclerosis. PLoS One 8:6, e67357, 1-13. Impact Factor: 2.776

Moscatelli, A., Naceri, A., and Ernst, M.O. (2013). Navigation in the fingertip. Proceedings IEEE World Haptics Conference, 519-523.

Lacquaniti, F., Bosco, G., Indovina, I., La Scaleia, B., Maffei, V., **Moscatelli, A.**, and Zago, M. (2013). Visual gravitational motion and the vestibular system in humans. Frontiers in Integrative Neuroscience 7:101, 1-12. Impact Factor: 2.810

Mori, F., Kusayanagi, H., Monteleone, F., **Moscatelli, A.**, Nicoletti, C. G., Bernardi, G., and Centonze, D. (2012). Short interval intracortical facilitation correlates with the degree of disability in multiple sclerosis. Brain Stimulation, 6:1, 67-71. Impact Factor: 6.919

Moscatelli, A., Mezzetti, M., and Lacquaniti, F. (2012). Modeling psychophysical data at the population-level: The generalized linear mixed model. Journal of Vision 12:26, 1-17. Impact Factor: 2.089

Zago, M., Carrozzo, M., **Moscatelli, A.**, and Lacquaniti, F. (2011). Time, Observation, Movement. Cognitive Critique 4, 61-86.

Di Paola, M., **Moscatelli, A.**, Bigler, E. D., Caltagirone, C., and Carlesimo, G. a. (2011). White matter changes in patients with hypoxic amnesia. Neurocase 17, 46-56. Impact Factor: 1.108

Moscatelli, A., Polito, L., and Lacquaniti, F. (2011). Time perception of action photographs is more precise than that of still photographs. Experimental Brain Research 210, 25-32. Impact

Factor: 1.806

Moscatelli, A., and Lacquaniti, F. (2011). The weight of time: Gravitational force enhances discrimination of visual motion duration. Journal of Vision 11:14, 1-17. Impact Factor: 2.089

Carrozzo, M., **Moscatelli, A.**, and Lacquaniti, F. (2010). Tempo rubato: Animacy speeds up time in the brain. PLoS One 5:12, e15638, 1-13. Impact Factor: 2.776

Abstract di Conferenze e Seminari

2023

Touch and hand movements: optimal integration and biased combination. Invited Talk at Workshop: "Touch in context: from the body to the external world". Chairs: Belkis Ezgi Arikan, Dimitris Voudouris. TeaP Conference, Trier, Germany.

2022

Invited talk: "The evaluation of tactile dysfunction in the hand in type 1 diabetes: a novel method based on haptics". At Robotics Research Jam Sessions, University of Pisa, Pisa, Italy.

Invited talk: "Touch and Hand Movements", Italian Institute of Technology (IIT), Genova, Italy.

Invited Lecture at 8th International Summer School of Neuroengineering, University Genova, Genova, Italy. From 18th to 22nd July 2022.

2021

Moscatelli, A. (2019). Motion perception in touch and vision: analogies and differences; Aix-Marseille University (UMR 7287), Marseille, France. (**Invited Talk**).

Moscatelli, A. (2018). Insights from Behavioral Neuroscience for the design of haptic devices. Nell'ambito del Workshop: "Mo-WS14: User-Centered Methods in Human-Robot Interaction", IROS, Madrid, Spain. (**Invited Talk**).

Moscatelli, A. (2017). Tactile Motion Perception. Nell'ambito del Workshop: "Wearable haptic systems: design, applications, and perspectives", IEEE World Haptics, Fürstenfeldbruck (Munich), Germany. (**Invited Talk**).

Moscatelli, A. (2017). Analysis of Categorical Data in Psychophysics: The Generalized Linear Mixed Model. (**Invited Talk**). Applied Cognitive Psychology, Ulm University, Ulm, Germany.

Moscatelli, A. (2017). Combining Tactile and Hand Motion: Constancy, Priors and Perceptual Illusions (**Invited Talk**). Experimental Psychology, Team Perception and Action, Justus-Liebig University Gießen, Gießen, Germany.

Moscatelli, A. (2017). Workshop: Analysis of Categorical Data in Psychophysics (**Invited Talk**). Experimental Psychology, Team Perception and Action, Justus-Liebig University Gießen, Gießen, Germany.

Moscatelli, A. (2016). Perceptual illusions and priors in the combination of tactile and hand motion (**Invited Talk**). Nell'ambito di: ERC PATCH Closing Workshop on Computational Touch, UPMC Jussieu Campus, Paris (France).

Bianchi, M. and **Moscatelli, A.**, Organizers. (2016) Full-day Workshop "Human and Robot Hands, Human and Robot Touch: Sensorimotor Synergies to Bridge the Gap Between Neuroscience and

Robotics", Haptics Symposium 2016, Philadelphia, Pennsylvania (USA).

Moscatelli, A. (2016) Invariants and priors in tactile perception of object motion. Nell'ambito di: Workshop "Haptic Invariance: from Mechanics, Perception, and Neural Coding to Interface Design", Haptics Symposium 2016, Philadelphia, Pennsylvania (USA).

Moscatelli, A. (2016) Sensorimotor Synergies: Fusion of Cutaneous Touch and Proprioception in the Perceived Hand Kinematics. Nell'ambito di: Workshop "Human and Robot Hands, Human and Robot Touch: Sensorimotor Synergies to Bridge the Gap Between Neuroscience and Robotics", Haptics Symposium 2016, Philadelphia, Pennsylvania (USA).

Böddeker, N., **Moscatelli, A.**, and Ernst, M.O. (2014). Homing with audio landmarks and path integration. Journal of Vision, 14(10), 2.

Moscatelli, A., and Lacquaniti, F. (2011). The weight of time: implied gravitational force enhances discrimination of visual motion duration. Journal of Vision, 11(11), 1217.

Carrozzo, M., **Moscatelli, A.**, and Lacquaniti, F. (2011). Tempo rubato: Animacy speeds up time in the brain. Journal of Vision, 11(11), 1228.

Libri

Bianchi, M., and **Moscatelli, A.** (Eds.). (2016). Human and Robot Hands. Springer International Publishing. `http://doi.org/10.1007/978-3-319-26706-7`

Attività Editoriale

Associate Editor per la rivista Frontiers in Integrative Physiology

Associate Editor per la rivista IEEE Transaction on Haptics

Revisore per riviste scientifiche internazionali, tra cui: Journal of Neurophysiology, Journal of Vision, Experimental Brain Research, Journal of Experimental Psychology: Human Perception and Performance, Cognitive Psychology, Attention Perception and Psychophysics, IEEE Transactions on Haptics, IEEE Transaction on Human Machine System, PLoS ONE, Scientific Reports.

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