

CURRICULUM VITAE

Sarah Boukarras

Employment

- **April 2022 – ongoing** Post-doc researcher at the Department of Psychology, Sapienza University of Rome
- **October 2019 – February 2022** Post-doc researcher at the IRCCS Santa Lucia Foundation, Rome, Italy.
- **June – October 2019** – Visiting PhD student at the Brighton and Sussex Medical School (Brighton, UK), Prof. Hugo Critchley’s lab.
- **November 2016 – October 2019** - PhD student at the Department of Psychology, Sapienza University of Rome and IRCCS Santa Lucia Foundation, Rome, Italy. Supervisor: Prof. Matteo Candidi.
- **February-September 2016** - Visiting intern at the Multisensory Lab, Department of Psychology, University of Milano Bicocca. Supervisor: Prof. Nadia Bolognini.
- **December 2013– February 2016** - Undergrad intern at the Social and Cognitive Neuroscience Lab (SCNL), Sapienza University of Rome. Supervisor: Dr. Ilaria Minio-Paluello.

Education

- **February 2020** – PhD in Psychology and Social Neuroscience at Sapienza University of Rome. Thesis title: “An investigation on the effects of social status on motor interactions and performance monitoring in social settings”. Supervisor: Prof. Matteo Candidi.
- **July 2015** – MSc in Cognitive Neuroscience at Sapienza University of Rome. Thesis title: “Emotion and identity recognition in the broader autism phenotype “. Supervisors: Dr Ilaria Minio Paluello and Prof. Salvatore Maria Aglioti. Final grade: 110/110 cum laude.
- **September 2013** – BSc in Psychology at Sapienza University of Rome. Thesis title: ‘‘Origins and evolution of the human consciousness in Julian Jaynes’ theory’’. Supervisor: Prof. Enrico Di Pace. Final grade: 101/110.

Additional courses

- **9-12 September 2019** – “Donders Brain Stimulation Toolkit” at the Donders Centre for Cognitive Neuroimaging (Nijmegen, NL).
- **9 July 2019** – “*PredPsych*” Workshop on R based toolbox for machine learning in experimental psychology held by Atesh Koul (IIT).
- **23-25 January 2019** – “Multilevel models and Bayesian statistics” held by Dr. Michele Scandola (University of Verona) at the Department of Psychology (Sapienza).
- **12-16 March 2018** – “Immersive Virtual Reality” held by Dr. Gaetano Tieri – (Unitelma Sapienza, Rome). The course was intended to provide students with a basic knowledge of programming and immersive virtual reality scenarios (software: XVR, 3D Studio Max, Unity).
- **3-9 September 2017**: Summer school “Visceral Mind VII- A hands-on course on the neuroanatomy of cognition” - Bangor, Wales (UK).
- **9-30 March 2017** – “Introduction to R” held by Dr. Sauro Civitillo (Potsdam University) at the Department of Psychology (Sapienza). Introduction to statistical software “R”.

Research interests

Behavioural and physiological synchronization during social interactions.

Kinematics and neural basis of motor interactions

Effects of social hierarchies on cognition and behaviour.

Neural basis of error and performance monitoring during motor interactions

Autonomic nervous system activity during error and feedback processing

Interpersonal perception

Implicit person evaluation

Research skills

Data manipulation and statistical analysis on R

Analysis of kinematic and behavioral measures during motor interactions

Analysis of physiological data (EKG, EMG)

Transcranial alternating current stimulation (tACS)

Transcranial direct current stimulation (tDCS)

Heart rate and heart rate variability

Measures of implicit preference

Language

Italian: mother tongue

English: C1

French: basic

Grants and awards

- **2018** - Funding for joint research projects for the mobility of the XXXII and XXXIII cycles PhD students. Project name: “CASTINg – Connecting body, brAin and mind for Social and Technological Innovation”. Destination: Brighton and Sussex Medical School, Brighton, UK. Funded period: from June 1st 2019 to October 31st 2019.
- **2016** - Research fellowship (3 years) at CoSAN PhD.
- **2016** - “Torno Subito”, a grant offered by Regione Lazio in order to provide a financial contribution for educational courses or work experiences outside the region. Project name: “Application of non-invasive brain stimulation in the investigation of social cognition” Destination: University of Milano – Bicocca. Funded period: from February 1st 2016 to August 31st 2016).
- **2015**: "Percorso d'eccellenza", a scholarship offered by the Department of Psychology (University of Rome "La Sapienza") to those students who have completed all the exams with outstanding marks and have participated to seminars and research activities.

Teaching activity

- **May 2020 and January 2021**– Member of the evaluation panel for exams in Social Neuroscience course (Sapienza University of Rome) as a “Cultore della materia” (non-faculty expert) in Experimental Methods in Social Neuroscience
- **March 2020 and April 2021** – Online lecture (2 hours) on “Social Categorization” in Social Neuroscience course (Sapienza University of Rome).
- **December 2018 and 2019** – Hands-on lecture (2 hours) on non-invasive brain stimulation techniques (tDCS and tACS) for the Cognitive Neuroscience course (Sapienza University of Rome).
- **March 2018** – Lecture (2 hours) on “The effects of social status on cognition, motor interactions and the social brain” in Social Neuroscience course (Sapienza University of Rome)
- **2018-2022** - Supervision of two MSc students at Sapienza University of Rome
- **2016** - Supervision of one MSc student at Bicocca University of Milan

Organization of scientific events

April 2021 – Co-organizer of the international conference “Neuroscience Goes Social 4.0” at Sapienza University of Rome.

Publications

- **Boukarras S**, Garfinkel S, Critchley H (in press) “Cardiac deceleration following positive and negative feedback is influenced by competence-based social status”. *Social Neuroscience*
- **Boukarras S**, Özkan, D. G., Era, V., Moreau, Q., Tieri, G., & Candidi, M. (2022). Midfrontal theta tACS facilitates motor coordination in dyadic human-avatar interactions. *Journal of Cognitive Neuroscience*.
- **Boukarras S**, Era V, Aglioti SM, Candidi M (2021) “Competence-based social status and implicit preference modulate the ability to coordinate during a joint grasping task”. *Scientific Reports*.
- **Boukarras S**, Era V, Aglioti SM, Candidi M (2020) “Modulation of preference for abstract stimuli following competence-based social status”. *Experimental Brain Research*.
- Minio-Paluello I, Porciello G, Gandolfo M, **Boukarras S**, Aglioti SM (2020) “The enfacement illusion boosts facial mimicry”, *Cortex*
- Era V, **Boukarras S**, Candidi M. (2019) “Neural correlates of action monitoring and mutual adaptation during interpersonal motor coordination: Comment on “The body talks: Sensorimotor communication and its brain and kinematic signatures” by G. Pezzulo et al.” *Physics of Life Reviews*.

Preprints

- **Boukarras S**, Ozkan DG, Era V, Moreau Q, Tieri G, Candidi M (2021) “Midfrontal theta tACS facilitates motor coordination in human-avatar motor interactions”, *bioRxiv*

Preregistrations

- **Boukarras S**, Schepisi M, Placidi V, Era V, Panasiti MS, Candidi M “Investigating how the tendency to lie to high vs. low status others depends on the pathway to status acquisition” [10.17605/OSF.IO/XJKFP](https://doi.org/10.17605/OSF.IO/XJKFP)

Oral presentations

- **Boukarras S**, Era V, Schepisi M, Placidi V, Panasiti MS, Garfinkel S, Critchley H, Candidi M, “Hierarchical interactions: behavioural and physiological effects of experienced and perceived social status”, XXIX Congresso Nazionale della Società Italiana di Psicofisiologia e Neuroscienze Cognitive (SIPF), Palermo, September 30 – October 2, 2021.
- **Boukarras S.**, “La realtà virtuale nello studio delle interazioni motorie”, Virtual Reality Experience Festival, Rome, October 16, 2020.
- Era V, **Boukarras S**, Candidi M. “Neural basis of human-avatar motor interactions embedded in different social contexts”. Symposium – Interactive brains: neural mechanisms of two-person social interaction. 4th International conference of the European Society for Cognitive and Affective Neuroscience (ESCAN), Leiden (Netherlands) 19th -22nd July 2018.

Poster presentations

- **Boukarras S**, Garfinkel S, Critchley H “Cardiac concomitants of feedback processing during a competence-based social status manipulation”. 8th MindBrainBody Symposium 2021, Max Plank Institute for Human Cognitive and Brain Sciences, Berlin (online event). March 15-18, 2021.
- **Boukarras S**, Ozkan D, Era V, Moreau Q, Tieri G, Candidi M. “Transcranial Alternating Current Stimulation highlights the role of midfrontal theta oscillations in performance monitoring during human-avatar motor interactions”. Transcranial Brain Stimulation in Cognitive Neuroscience Workshop, Center for Mind/Brain Sciences - CIMEC University of Trento (online event). December 3-4, 2020.
- **Boukarras S**, Ozkan D, Era V, Moreau Q, Tieri G, Candidi M. “Modulation of motor performance during human-avatar interaction by midfrontal theta transcranial alternating current stimulation”. Poster presentation. 8th Joint Action Meeting (JAM VIII). Genova, July 10-13, 2019.
- **Boukarras S**, Era V, Candidi M. “Competence-based social status modulates affective evaluation and dyadic motor coordination”. Poster presentation. 4th International conference of the European Society for Cognitive and Affective Neuroscience (ESCAN), Leiden (Netherlands) 19th -22nd July 2018.
- **Boukarras S**, Era V, Candidi M. “Social status shapes affective evaluation and dyadic motor interactions”. Poster presentation. MeeTo 2018 conference “From moving bodies to interactive minds”. Torino (Italy), May 25th-27th 2018.

- Moreau Q., Pavone EF, **Boukarras S.**, Tieri G., and Candidi M. “Neural correlates of a joint action in a human-avatar paradigm”. Poster presentation. 7th Joint Action Meeting (JAM). London (UK), 2-25th July 2017.
- Porciello G., Gandolfo M., **Boukarras S** and Minio-Paluello I. “Interpersonal multisensory stimulation enhances emotional contagion”. Poster presentation. XXIV Congresso Nazionale della Società Italiana di Psicofisiologia. “Brains in Action. Dalle Neuroscienze di Base ai Sistemi Sociali Complessi”. Milano, (Italy), October 27th – 29th 2016.
- Minio-Paluello I., Gandolfo M., **Boukarras S** and Porciello G. “Interpersonal multisensory stimulation enhances emotional contagion”. Poster presentation. International Convention of Psychological Science (ICPS), Vienna (Austria), March 23th-25th 2017.

Editorial activity

I served as ad-hoc reviewer for the following journals: SAGE Open, Social Neuroscience.