

## INFORMAZIONI PERSONALI

Francesca Strappini

ESPERIENZA  
PROFESSIONALE

11-12/2019 - Translation help for the Master in Cognitive Neuroscience. Psychology Department, Sapienza University, Rome  
11-12/2019 - Teaching support in Neurophysiology and Neuroanatomy for the Master in Cognitive Neuroscience, Psychology Department, Sapienza University, Rome  
01/05/2016-28/02/2020 - Visiting Scientist, Neurobiology Department, Weizmann Institute of Science, Rehovot, Israel  
01/02/2017 - 31/12/2018 - Scholarship holder, Neurology Unit, L'Istituto Neurologico Mediterraneo Neuromed, Venafrò (IS), Italy.  
01/04/2014 - 31/04/2016 - Postdoctoral Research Fellow, Neurobiology Department, Weizmann Institute of Science, Rehovot, Israel, advisor Prof. Rafael Malach  
01/10/2011 - 30/09/2013 - Postdoctoral Research Fellow, Neurology Department, Washington University in Saint Louis, Saint Louis, MO, USA, advisor: Maurizio Corbetta  
2 010-2011 - Visiting Scientist, Neurology Department, Washington University in Saint Louis, Saint Louis, MO, USA

## ISTRUZIONE E FORMAZIONE

2020-present: SPECIALIZATION IN COGNITIVE PSYCHOTHERAPY It. "Scuola italiana di cognitivismo clinico" SICC, Rome, Italy

2020-present: CERTIFIED DIPLOMA IN HYPNOTHERAPY HMI College of Hypnotherapy, Tarzana, CA, USA

2007-2011: Ph.D. IN COGNITIVE NEUROSCIENCE Department of Psychology, Sapienza University, Rome, Italy Dissertation: Neural Correlates of Visual Crowding Advisor: Prof. Marialuisa Martelli Graduation Date: 05/07/2011

2000-2007: M.S.c. IN GENERAL AND EXPERIMENTAL PSYCHOLOGY Department of Psychology, Sapienza University, Rome, Italy Dissertation: Integrative Agnosia, Crowding, and Multiple Realizability Advisor: Prof. Enrico Di Pace Graduated: 13/03/2007 - 110/110

Additional Training Main attended courses in Washington University in Saint Louis : λ Surfaced-based analysis and Functional analysis (FreeSurfer tutorial and workshop by Martinos Center for Biomedical Imaging) λ Functional Neuroimaging methods λ Matlab  
λ MRI Physics (Summer School 2010, 2011, 2012) λ Grant writing λ Fundamental of research writing for sciences I (University College)  
Fundamental of research writing for sciences II (University College)

Presentation skills for the sciences (University College) λ Talking to Americans: casual and professional conversations (University College)

## Altre competenze

- My research is within the area of cognitive psychology and neuroscience, focusing on cognition, attention, and visual processing in both unimpaired and impaired subjects. My expertise is mainly in designing, performing, and analyzing both behavioral and imaging studies using univariate and multivariate methods, retinotopic mapping, and functional connectivity. My research interests have recently been extended to investigating the attention mechanisms underlying processing of visual emotional stimuli during bottom-up and top-down attentional modulations and emotional conflict. My publications have covered the following topics: • Interaction between visual integration and attention • Visual agnosia • Cortical spontaneous activity 3 • Machine learning methods applied to fMRI data • Retinotopic mapping • Philosophy of mind and visual consciousness

## ULTERIORI INFORMAZIONI

Publicazioni  
Presentazioni  
Progetti  
Conferenze  
Seminari  
Riconoscimenti e premi  
Appartenenza a gruppi /  
associazioni  
Referenze  
Menzioni  
Corsi  
Certificazioni

- 2017-2018 - Scholarship funded by the Italian Minister of Health and Education - It. "Bando di ricerca finalizzata giovani ricercatori" Project title: Understanding neural mechanism of Spatial Neglect by linking anatomical damage to resting state functional connectivity. 2014-2016 - Paola dei Mansi Fellowship, joint post-doctoral program in I-CORE COGNITION (with CNR) 465.000 NIS 2011-2013 - grant funded by McDonnell Center for System Neuroscience, \$80.000 Project funded to support the development of Multivoxel Pattern Analysis for fMRI data in fidi 2007-2010 - Doctoral fellowship, Psychology Department, Sapienza University, funded by the Italian Ministry of Health and Education
- Topics and Expertise Functional Magnetic Resonance Imaging (fMRI) in humans and monkeys Visual perception Attention Neurophysiology Functional Connectivity Visual Crowding Visual Agnosia Symmetry perception Retinotopic Mapping Philosophy of Mind Freesurfer, Afni/SUMA, SPM, Caret, Brain Voyager, Matlab, SPSS
- 2016 - Ofer Karp, MSc student coming for a 3-months project in Prof. Rafael Malach's lab,

- Neurobiology Department, Weizmann Institute of Science, Rehovot, Israel. Resulted in publication in *Cerebral Cortex*. 2016 - Nethanel Ehrmann, MSc student coming for a 3-months project in Prof. Rafael Malach's lab, Neurobiology Department, Weizmann Institute of Science, Rehovot, Israel
- 2008-2009 - Agostino Maria Ticino, undergraduate student, fMRI training, Sapienza University in Rome and Santa Lucia Foundation IRCSS in Rome 2007 - Undergraduate students, Matlab course, Department of Psychology, Sapienza University in Rome
- R. Malach, Weizmann Institute of Science, Neurobiology Department, Rehovot (Israel) M. Katkov, Weizmann Institute of Science, Neurobiology Department, Rehovot (Israel) D. Sagi, Weizmann Institute of Science, Neurobiology Department, Rehovot (Israel) M. Irani, Weizmann Institute of Science, Department of Computer Science and Applied Mathematics, Rehovot (Israel) M. Corbetta, Washington University in Saint Louis, MO (USA), Neurology Department - Università di Padova A. Snyder, Washington University in Saint Louis, MO (USA), Radiology Department M. MacAvoy, Washington University in Saint Louis, MO (USA), Radiology Department G. Shulman, Washington University in Saint Louis, MO (USA), Radiology Department A. Nehorai, Washington University in Saint Louis, Saint Louis, MO (USA), Preston M. Green Department of Electrical and Systems Engineering M.I. Sereno, San Diego State University, CA (USA), Department of Psychology D. Pelli, NYU, Cognition & Perception, Center for Neural Science, Center for Brain Imaging K. Kay, University of Minnesota, MN (USA) Computational Visual Neuroscience Laboratory at CMR
  - Peer Reviewer for Scientific Reports Peer Reviewer for Frontiers in Psychology Peer Reviewer for Frontiers in Human Neuroscience Peer Reviewer for NeuroImage Peer Reviewer for Human Brain Mapping
  - Memberships  $\lambda$  Member of SITC (Italian Society of Cognitive and Behavioral Therapy)  $\lambda$  Associate Member of EuroScience, the grassroots association of researchers in Europe. EuroScience represents European scientists in all areas of knowledge and provides the basis for the development of policy at the European, national and regional levels and for societal debates. It counts 2600 individual members in 77 countries and 14 corporate members  $\lambda$  Member of the Italian register of psychologists (It. Albo nazionale degli Psicologi della regione Lazio, sez. A) from 2019
  - Posters Strappini, F., Wilf, M., Golan, T., Hahamy, A., Harel, M. & Malach, R. (2019) Spontaneous resting-state patterns reflect naturalistic activations in higher-order visual areas. Organization for Human Brain Mapping (OHBM). Rome, Italy. Strappini, F., Pitzalis, S., Hadj-Bouziane, F., Dal Bo, G., Guedj, C., Meunier, M., Farnè, A., Fattori, P. & Galletti, C. (2018). Optic Flow selectivity in the macaque motion area V6: a direct parallel with human V6. Society for Neuroscience (SfN). San Diego (CA), USA. Strappini, F., Wilf, M., Golan, T., Hahamy, A., Harel, M. & Malach, R. (2016) Spontaneous Patterns in Human Visual Cortex Reflect Responses to Naturalistic Sensory Stimuli. 22nd Organization for Human Brain Mapping Meeting. Geneva, Switzerland. 6 Wilf, M.\* , Strappini, F.\* , Harel, M., Golan, T. & Malach, R. (2015) More than meets the eye: Correspondence of retinotopic visual areas organization during resting state, beep detection and natural viewing. 2nd Israeli Conference of Cognitive Research. Akko, Israel.
  - Strappini, F., Martelli, M., Cozzo, C., & di Pace, E. (2020). Empirical evidence for intraspecific multiple realization?. *Frontiers in Psychology*, 11. Bely, R. Gaziv, G., Hoogi, A., Strappini, F., Golan, T., Irani, M. (2019) From voxels to pixels and back: Self-supervision in natural-image reconstruction from fMRI. NIPS Strappini, F., Wilf, M., Karp, O., Goldberg, H., Harel, M., Furman-Haran, E., ... & Malach, R. (2018). Resting-State Activity in High-Order Visual Areas as a Window into Natural Human Brain Activations. *Cerebral Cortex*. Pitzalis, S., Strappini, F., Bultrini, A., & Di Russo, F. (2018). Detailed spatiotemporal brainmapping of chromatic vision combining high-resolution VEP with fMRI and retinotopy. *Human brain mapping*. M Katkov, F Strappini, T Livne, S Pitzalis, D Sagi, R Malach. (2018). Visual cortex is sensitive to order-disorder phase transition. *Journal of Vision* 18 (10), 808-808 Strappini, F., Galati, G., Di Pace, E., Martelli, M., Pitzalis, S. (2017). Effects of crowding and attention in human extrastriate cortex. *Scientific Reports*. 7 Strappini, F., Pelli, D., Di Pace, E., Martelli, M. (2017). Agnosic vision is like peripheral vision, which is limited by crowding. *Cortex*. Strappini, F., Gilboa, E., Pitzalis, S., Kay, K., McAvoy, M., Nehorai, A., & Snyder, A. Z. (2016). Adaptive smoothing based on Gaussian processes regression increases the sensitivity and specificity of fMRI data. *Human Brain Mapping*. Wilf, M., Strappini, F., Golan, T., Hahamy, A., Harel, M., & Malach, R. (2015). Spontaneously Emerging Patterns in Human Visual Cortex Reflect Responses to Naturalistic Sensory Stimuli. *Cerebral Cortex*, bhv275. Strappini, F., Pitzalis, S., Snyder, A. Z., McAvoy, M. P., Sereno, M. I., Corbetta, M., & Shulman, G. L. (2015). Eye position modulates retinotopic responses in early visual areas: a bias for the straight-ahead direction. *Brain Structure and Function*, 220(5), 2587-2601. M Martelli, F Strappini, E Di Pace, D Pelli. (2015). Agnosic vision is crowded. *Journal of vision* 15 (12), 921-921 Pitzalis, S., Strappini, F., De Gasperis, M., Bultrini, A., & Di Russo, F. (2012). Spatio-temporal brain mapping of motion-onset VEPs combined with fMRI and retinotopic maps. *PLoS One*, 7(4), e35771. Di Russo, F., Stella, A., Spitoni, G., Strappini, F., Sdoia, S., Galati, G., ... & Pitzalis, S. (2012). Spatiotemporal brain mapping of spatial attention effects on pattern-reversal ERPs. *Human brain mapping*, 33(6), 1334-1351. Pitzalis, S., Hadj-Bouziane, F., Dal Bo, G., Guedj, C., Strappini, F. Meunier, M., Farnè, A., Fattori, P., and

Galletti, C. Optic Flow selectivity in the macaque medial motion area V6. Submitted  
Gaziv, G., Belyi, R., Granot, N., Hoogi, A., Strappini, F., Golan, T., Irani, M. Self-Supervised Natural image reconstruction and rich semantic classification from brain activity. Submitted  
My first Open Access article was published in 2012. Since then, more than 40% of my journal publications have been OA I have published on the following international scientific peer reviewed journals:  $\lambda$  PloseOne  $\lambda$  Human Brain Mapping  $\lambda$  Brain Structure and Function  $\lambda$  Cortex  $\lambda$  Cerebral Cortex  $\lambda$  Scientific Reports  $\lambda$  Advances in Neural Information Processing Systems  $\lambda$  Frontiers in Psychology

**Dati personali** Autorizzo il trattamento dei miei dati personali ai sensi del Decreto Legislativo 30 giugno 2003, n. 196 "Codice in materia di protezione dei dati personali".

La sottoscritta dichiara di essere consapevole che il presente *curriculum vitae* sarà pubblicato sul sito istituzionale dell'Ateneo, nella Sezione "Amministrazione trasparente", nelle modalità e per la durata prevista dal d.lgs. n. 33/2013, art. 15.

Data 23.08.2020

f.to Francesca Strappini