CURRICULUM VITAE

Francesca Strappini, PhD

October, 2019

EDUCATION

2011 PhD in Cognitive Neuroscience, Sapienza University, Rome, Italy
Thesis Title: *Neural Correlates of Visual Crowding*
Graduated: 05/07/2011
Advisor: Prof. Marialuisa Martelli

2007 M.S.c. in General and Experimental Psychology ,
Sapienza University, Rome, Italy
Thesis Title: *Integrative Agnosia, Crowding, and Multiple Realizability*
Graduated: 13/03/2007 - 110 cum laude
Advisor: Prof. Enrico Di Pace

1998 Diploma, Liceo Artistico Sperimentale (first-class honours), Istituto S. Orsola, Rome, Italy
Thesis Title: *Progetto di un museo sul fiume Tevere*
Graduated: 07/1998 - 60/60
Advisor: Prof. Mario Capranica

2010-2013 Main attended courses in Washington University in Saint Louis :
Surfaced-based analysis and Functional analysis (FreeSurfer tutorial and workshop by Martinos Center for Biomedical Imaging)
Functional Neuroimaging methods
Matlab
MRI Physics (Summer School 2010, 2011, 2012)

Grant writing
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)
Talking to Americans: casual and professional conversations (University College)

PREVIOUS POSITION AND COLLABORATIONS

2017-2019 Visiting Scientist, Neurobiology Department, Weizmann Institute of Science, Rehovot, Israel

2017-2018 Collaboratrice di ricerca, Neurologia,
L'Istituto Neurologico Mediterraneo Neuromed,
Venafro (IS), Italy.

2014-2017 Postdoctoral Research Fellow, Neurobiology Department,
Weizmann Institute of Science, Rehovot, Israel
Advisor: Prof. Rafael Malach

2011-2013 Postdoctoral Research Fellow, Neurology Department, Washington University in Saint Louis, Saint Louis, MO, USA
Advisor: Maurizio Corbetta

2010-2011 Visiting Scientist, Neurology Department, Washington University in Saint Louis, Saint Louis, MO, USA

GRANTS/FELLOWSHIPS

2017-2019 Bando di ricerca finalizzata giovani ricercatori - collaboratore di ricerca
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.

2007-2010 doctoral fellowship at 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
Neurophysiology
Functional Connectivity
Visual Crowding
Visual Agnosia
Symmetry perception
Retinotopic Mapping
Philosophy of Mind
Freesurfer, Afni/SUMA, FSL, SPSS

MENTORING EXPERIENCE

2016 Ofer Karp, M.A., Neurobiology Department,
Weizmann Institute of Science, Rehovot, Israel.
Resulted in publication in Cerebral Cortex.

Nethanel Ehrmann, M.A., Neurobiology Department,
Weizmann Institute of Science, Rehovot, Israel

2008-2009 Agostino Maria Ticino, undergraduate student, fMRI training,
Sapienza University in Rome
and Fondazione Santa Lucia IRCSS in Rome

2007 Undergraduate students, matlab course,
Department of Psychology, Sapienza University in Rome

INTERNATIONAL SCIENTIFIC COLLABORATIONS

R. Malach, Weizmann Institute of Science, Neurobiology Department, Rehovot (Israel)
M. Katkov, Weizmann Institute of Science, Neurobiology Department, Rehovot (Israel)
D. Sagi, Weizmann Institue of Science, Neurobiology Department, 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.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 CMRR

EDITORIAL ACTIVITY

Peer Reviewer for Scientific Reports
Peer Reviewer for Frontiers in Psychology
Peer Reviewer for NeuroImage

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.

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.

PUBLICATIONS

Bely, R. Gaziv, G., Hoogi, A., **Strappini, F**., Golan, T., Irani, M. (in press) 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 brain mapping 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.*

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**.**

Roma, 08/10/2019