

# Stanford

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## Matilde M Vaghi

Postdoctoral Scholar, Psychology

### Bio

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#### PROFESSIONAL EDUCATION

- PhD, University of Cambridge , Experimental Psychology (2017)
- MSc, Vita-Salute San Raffaele University , Cognitive Neuroscience (2012)
- BA, Vita-Salute San Raffaele University , Psychology (2010)

#### STANFORD ADVISORS

- Russell Poldrack, Postdoctoral Faculty Sponsor
- Russell Poldrack, Postdoctoral Research Mentor

### Publications

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#### PUBLICATIONS

- **Compulsivity is linked to reduced adolescent development of goal-directed control and frontostriatal functional connectivity.** *Proceedings of the National Academy of Sciences of the United States of America*  
Vaghi, M. M., Moutoussis, M. n., Váša, F. n., Kievit, R. A., Hauser, T. U., Vértes, P. E., Shahar, N. n., Romero-Garcia, R. n., Kitzbichler, M. G., Bullmore, E. T., Dolan, R. J.  
2020
- **Obsessive-Compulsive Disorder: Puzzles and Prospects** *NEURON*  
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- **Action-Outcome Knowledge Dissociates From Behavior in Obsessive-Compulsive Disorder Following Contingency Degradation** *BIOLOGICAL PSYCHIATRY-COGNITIVE NEUROSCIENCE AND NEUROIMAGING*  
Vaghi, M. M., Cardinal, R. N., Apergis-Schoute, A. M., Fineberg, N. A., Sule, A., Robbins, T. W.  
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- **Hypoactivation and Dysconnectivity of a Frontostriatal Circuit During Goal-Directed Planning as an Endophenotype for Obsessive-Compulsive Disorder** *BIOLOGICAL PSYCHIATRY-COGNITIVE NEUROSCIENCE AND NEUROIMAGING*  
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- **Compulsivity Reveals a Novel Dissociation between Action and Confidence** *NEURON*  
Vaghi, M. M., Luyckx, F., Sule, A., Fineberg, N. A., Robbins, T. W., De Martino, B.  
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- **Specific Frontostriatal Circuits for Impaired Cognitive Flexibility and Goal-Directed Planning in Obsessive-Compulsive Disorder: Evidence From Resting-State Functional Connectivity** *BIOLOGICAL PSYCHIATRY*  
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2017; 81 (8): 708–17

- **Atypical action updating in a dynamic environment associated with adolescent obsessive-compulsive disorder.** *Journal of child psychology and psychiatry, and allied disciplines*  
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2022
- **Preference uncertainty accounts for developmental effects on susceptibility to peer influence in adolescence.** *Nature communications*  
Reiter, A. M., Moutoussis, M., Vanes, L., Kievit, R., Bullmore, E. T., Goodyer, I. M., Fonagy, P., Jones, P. B., NSPN Consortium, Dolan, R. J., Bullmore, E., Bullmore, E., Dolan, R., et al  
2021; 12 (1): 3823
- **Set-shifting-related basal ganglia deformation as a novel familial marker of obsessive-compulsive disorder.** *The British journal of psychiatry : the journal of mental science*  
Isobe, M., Vaghi, M., Fineberg, N. A., Apergis-Schoute, A. M., Bullmore, E. T., Sahakian, B. J., Robbins, T. W., Chamberlain, S. R.  
1800: 1-4
- **Cognitive Inflexibility in OCD and Related Disorders.** *Current topics in behavioral neurosciences*  
Chamberlain, S. R., Solly, J. E., Hook, R. W., Vaghi, M. M., Robbins, T. W.  
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- **Reduced Glutamate Turnover in the Putamen Is Linked With Automatic Habits in Human Cocaine Addiction.** *Biological psychiatry*  
Ersche, K. D., Lim, T. V., Murley, A. G., Rua, C., Vaghi, M. M., White, T. L., Williams, G. B., Robbins, T. W.  
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- **Experimentally induced and real-world anxiety have no demonstrable effect on goal-directed behaviour.** *Psychological medicine*  
Gillan, C. M., Vaghi, M. M., Hezemans, F. H., van Ghesel Grothe, S., Dafflon, J., Brühl, A. B., Savulich, G., Robbins, T. W.  
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- **Conservative and disruptive modes of adolescent change in human brain functional connectivity** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
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- **Schizotypy-Related Magnetization of Cortex in Healthy Adolescence Is Colocated With Expression of Schizophrenia-Related Genes.** *Biological psychiatry*  
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2019
- **Brain-behaviour modes of covariation in healthy and clinically depressed young people** *SCIENTIFIC REPORTS*  
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- **Impaired awareness of action-outcome contingency and causality during healthy ageing and following ventromedial prefrontal cortex lesions** *NEUROPSYCHOLOGIA*  
O'Callaghan, C., Vaghi, M. M., Brummerloh, B., Cardinal, R. N., Robbins, T. W.  
2019; 128: 282–89
- **Sentential negation of abstract and concrete conceptual categories: a brain decoding multivariate pattern analysis study** *PHILOSOPHICAL TRANSACTIONS OF THE ROYAL SOCIETY B-BIOLOGICAL SCIENCES*  
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- **Mapping Compulsivity in the DSM-5 Obsessive Compulsive and Related Disorders: Cognitive Domains, Neural Circuitry, and Treatment** *INTERNATIONAL JOURNAL OF NEUROPSYCHOPHARMACOLOGY*  
Fineberg, N. A., Apergis-Schoute, A. M., Vaghi, M. M., Banca, P., Gillan, C. M., Voon, V., Chamberlain, S. R., Cinosi, E., Reid, J., Shahper, S., Bullmore, E. T., Sahakian, B. J., Robbins, et al  
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- **Effective connectivity gateways to the Theory of Mind network in processing communicative intention** *NEUROIMAGE*  
Tettamanti, M., Vaghi, M. M., Bara, B. G., Cappa, S. F., Enrici, I., Adenzato, M.  
2017; 155: 169–76
  
- **Biological markers for anxiety disorders, OCD and PTSD: A consensus statement. Part II: Neurochemistry, neurophysiology and neurocognition.** *The world journal of biological psychiatry : the official journal of the World Federation of Societies of Biological Psychiatry*  
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- **Decoding the neural representation of fine-grained conceptual categories** *NEUROIMAGE*  
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- **Fine-Grained Semantic Categorization across the Abstract and Concrete Domains** *PLOS ONE*  
Ghio, M., Vaghi, M., Tettamanti, M.  
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