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Education Background

January. 2022.

Ph.D, Cognitive Neuroscience
Beijing Normal University

June 2016.

B.Sc., Psychology
Northeast Normal University

Fellowship and Awards

2021

Fellowship to Computational and Cognitive
Neuroscience (CCN) summer school, Cold Spring
Harbor Laboratory Asia (Suzhou, China)

2019

Fellowship to Kavli summer institute in cognitive
neuroscience (University of California, Santa Barbara)

2018

Distinguished graduate research fellowship in State
KeyLaboratory of Cognitive Neuroscience and Learning

2018

National graduate research fellowship

Publications

1. Zheng S†, **Yan X**†, Siegel J, Chituc V, Li S, Crockett MJ, Ma Y. Self-serving karmic beliefs: prosociality influences vicarious optimism (2020). *Psyarxiv*. († **co-first author**)
2. Liu Y, Li S#, Lin W#, Li W#, **Yan X**, Wang X, Pan X, RB Rutledge, Ma Y. Amygdala activity tracks deviations from social preferences (2019). *Nat Neurosci* 22 (4): 633-641 (# co-second author)
3. **Yan X**, Yong X, Huang W, Ma Y. Placebo treatment facilitates social trust and approach behavior (2018). *Proc Natl Acad Sci U S A* 115(22):5732-37.
4. Feng C†, **Yan X**†, Huang W, Han S, Ma Y. Neural representations of the multidimensional self in the cortical midline structures (2018). *Neuroimage* 183:291-299. († **co-first author**)
5. Wang D, **Yan X**, Li M, Ma Y (2017). Neural substrates underlying oxytocin effect: A quantitative meta-analysis of pharmaco-imaging studies. *Soc Cogn Affect Neurosci* 12(10): 1565-1573.
6. Ma Y, Li S, Wang C, Liu Y, Li W, **Yan X**, Chen Q, Han S (2016). Distinct oxytocin effects on belief updating in response to desirable and undesirable feedback. *Proc Natl Acad Sci U S A* 113(33):9256-61.

Selective unpublished work

1. Interactive gaming in spatial networks-The multi-agent modeling (simulation) approach_ https://psywalkeryanxy.github.io/work_on_papers/2021_YanX_InteractiveGaming_in_spatial_networks.pdf
2. Dynamic features within subcortical network serve as potential transdiagnostic biomarker https://psywalkeryanxy.github.io/work_on_papers/MP_HIP_Yan.pdf

Conference presentations

1. **Yan X** “Neural representations of social placebo effect”, 2020, Neuromatch 3.0
<https://www.youtube.com/watch?v=AWtjfNvVsrk>
2. **Yan X**, Ma Y. “Neural pattern change of memory control of personal strengths and weaknesses”, 2018, 11th Annual Meeting of The Social & Affective Neuroscience Society. New York
3. Huang I, **Yan X**, Yuan W, Wu D, Li Z, Ma Y. “How social stress and oxytocin influence the way people update their belief”, 2018, 11th Annual Meeting of The Social & Affective Neuroscience Society. New York

Miscellaneous

Additional Training (finished):

The Computational and Cognitive Neuroscience (CCN) summer school, *Cold Spring Harbor Laboratory, 2021*

Online summer school for Computational Neuroscience, *Neuromatch Academy, 2020*

Computer Simulations, *Coursera, 2020*

Social Network Analysis, *Coursera, 2020*

Network Dynamics of Social Behavior, *Coursera, 2020*

Introduction to HTML5, *Coursera, 2020*

Julia Scientific Programming, *Coursera, 2020*

Facial Expression Recognition with Keras, *Coursera, 2020*

Kavli summer school in cognitive neuroscience, *California USA, 2019*

Additional Training (on-going):

Internship at Chinese Institute for Brain Research (CIBR). *April, 2021*

Python for the practicing neuroscientist: an online educational resource. *March, 2021*

Programming knowledge:

MATLAB, Python, R, Julia, jsPsych, HTML5, CSS3, NetLogo

Data analysis:

fMRI data (All functional connectivity in resting fMRI/task fMRI, graph theory analysis, RSA, MVPA, Reinstatement analysis, PPI, parametric modulation, Activation)

Behavior data (Bayesian statistics, Agent-based simulations, Rescorla-Wagner Model, Experience-weighted attractor, Network analysis, Hierarchical gaussian filter, Drift-diffusion model, Attractor-model, Text mining)

Teaching

(aim to teach junior graduate students to acquire necessary skills for scientific work)

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1. How to create your personal website (Html5 + CSS3)
 2. Representational similarity analysis
 3. Resting-state fMRI analysis
 4. Diffusion Decision model & value-based DDM
 5. Reinforcement learning & Markov decision processes
 6. Attractor model & decision making
 7. Neural Networks-basic concepts

All materials (slides, tutorials, code) for these courses can be found at my personal website:

<https://psywalkeryanxy.github.io/>

