


Yuanyuan Gao (She/Her)

Postdoctoral Scholar, Psychiatry

 NIH Biosketch available Online

 Curriculum Vitae available Online

Bio

BIO

Yuanyuan Gao completed her PhD at Rensselaer Polytechnic Institute. Her PhD thesis researched the effects of neuromodulation on human motor learning using functional near-infrared spectroscopy (fNIRS). She finished her first postdoctoral training term in Dr. David Boas' lab in Boston University on advanced fNIRS data analysis. She is now a postdoctoral fellow working at Stanford University for her second term of postdoctoral training on the clinical applications of fNIRS. Her research interests are fNIRS, its multimodels with fMRI, EEG, eye-tracker, physiology measurements, neuromodulation and machine learning models, and its applications in clinical research.

PROFESSIONAL EDUCATION

- Master of Engineering, High School Affiliated to Beihang University (2013)
- Doctor of Philosophy, Rensselaer Polytechnic Institute (2020)
- Bachelor of Engineering, High School Affiliated to Beihang University (2010)
- Ph.D., Rensselaer Polytechnic Institute, Mechanical Engineering (2020)
- Master, Beihang University, Mechanical Engineering (2013)
- BS, Beihang University, Aircraft Environment and Life Security Engineering (2010)

STANFORD ADVISORS

- Allan Reiss, Postdoctoral Faculty Sponsor

LINKS

- LinkedIn: <https://www.linkedin.com/in/yuanyuan-gao-21ba02182/>

Publications

PUBLICATIONS

- **Prenatal and childhood exposure to organophosphate pesticides and functional brain imaging in young adults.** *Environmental research*
Sagiv, S. K., Baker, J. M., Rauch, S., Gao, Y., Gunier, R. B., Mora, A. M., Kogut, K., Bradman, A., Eskenazi, B., Reiss, A. L.
2023; 117756
- **Assessment of Surgical Tasks Using Neuroimaging Dataset (ASTaUND).** *Scientific data*
Kamat, A., Eastmond, C., Gao, Y., Nemani, A., Yanik, E., Cavuoto, L., Hackett, M., Norfleet, J., Schwaitzberg, S., De, S., Intes, X.
2023; 10 (1): 699
- **Short-separation regression incorporated diffuse optical tomography image reconstruction modeling for high-density functional near-infrared spectroscopy.** *Neurophotonics*
Gao, Y., Rogers, D., von Luhmann, A., Ortega-Martinez, A., Boas, D. A., Yucel, M. A.

2023; 10 (2): 025007

- **How much do time-domain functional near-infrared spectroscopy (fNIRS) moments improve estimation of brain activity over traditional fNIRS?** *Neurophotonics*

Ortega-Martinez, A., Rogers, D., Anderson, J., Farzam, P., Gao, Y., Zimmermann, B., Yucel, M. A., Boas, D. A.

2023; 10 (1): 013504

- **Deep learning-based motion artifact removal in functional near-infrared spectroscopy** *NEUROPHOTONICS*

Gao, Y., Chao, H., Cavuoto, L., Yan, P., Kruger, U., Norfleet, J. E., Makled, B. A., Schwaitzberg, S., De, S., Intes, X.

2022; 9 (4): 041406

- **Functional brain connectivity related to surgical skill dexterity in physical and virtual simulation environments (vol 8, 015008, 2021)** *NEUROPHOTONICS*

Nemani, A., Kamat, A., Gao, Y., Yucel, M., Gee, D., Cooper, C., Schwaitzberg, S., Intes, X., Dutta, A., De, S.

2021; 8 (3): 039801

- **Functional Brain Imaging Reliably Predicts Bimanual Motor Skill Performance in a Standardized Surgical Task** *IEEE TRANSACTIONS ON BIOMEDICAL ENGINEERING*

Gao, Y., Yan, P., Kruger, U., Cavuoto, L., Schwaitzberg, S., De, S., Intes, X.

2021; 68 (7): 2058-2066

- **Decreasing the Surgical Errors by Neurostimulation of Primary Motor Cortex and the Associated Brain Activation via Neuroimaging** *FRONTIERS IN NEUROSCIENCE*

Gao, Y., Cavuoto, L., Dutta, A., Kruger, U., Yan, P., Nemani, A., Norfleet, J. E., Makled, B. A., Silvestri, J., Schwaitzberg, S., Intes, X., De, S.

2021; 15: 651192

- **The Effects of Transcranial Electrical Stimulation on Human Motor Functions: A Comprehensive Review of Functional Neuroimaging Studies** *FRONTIERS IN NEUROSCIENCE*

Gao, Y., Cavuoto, L., Schwaitzberg, S., Norfleet, J. E., Intes, X., De, S.

2020; 14: 744

- **A machine learning approach to predict surgical learning curves**

Gao, Y., Kruger, U., Intes, X., Schwaitzberg, S., De, S.

MOSBY-ELSEVIER.2020: 321-327