Xinyang Yu

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EDUCATION

Social Genetic and Developmental Psychiatry Centre, King's College London　　　　London, UK
PhD in Genetics research　　　　*Oct 2021-Apr 2025*

Institute of Psychology, Chinese Academy of Sciences (IPCAS)　　　　Beijing, China
M.S. in Psychology, GPA: 3.73/4, Top 5%　　　　*Sep 2018-Jul 2021*

Department of Clinical Medicine, Peking University (PKU)　　　　Beijing, China
B.S. in Medical Laboratory Technology, GPA: 3.52/4, Rank: 2/23　　　　*Sep 2014-Jul 2018*

School of Psychological and Cognitive Sciences, Peking University (PKU)　　　　Beijing, China
B.S. in Psychology, Double Major　　　　*Sep 2015-Jul 2018*

EMPLOYMENT HISTORY

04/2025 – present: Postdoctoral Research Associate, King's College London, PI: Sylvane Desrivières

PUBLICATIONS

Yu, X., Zhang, Z., Herle, M., Banaschewski, T., Barker, G. J., Bokde, A. L. W., Flor, H., Grigis, A., Garavan, H., Gowland, P., Heinz, A., Brühl, R., Martinot, J. L., Martinot, M. P., Artiges, E., Nees, F., Orfanos, D. P., Lemaître, H., Paus, T., Poustka, L., … IMAGEN consortium (2025). Relationships of eating behaviors with psychopathology, brain maturation and genetic risk for obesity in an adolescent cohort study. *Nature Mental Health, 3*(1), 58–70. https://doi.org/10.1038/s44220-024-00354-7

Yu, X., Robinson, L., Bobou, M., Zhang, Z., Banaschewski, T., Barker, G. J., Bokde, A. L. W., Flor, H., Grigis, A., Garavan, H., Gowland, P., Heinz, A., Brühl, R., Martinot, J. L., Paillère Martinot, M. L., Artiges, E., Nees, F., Orfanos, D. P., Lemaître, H., Poustka, L., … IMAGEN, STRATIFY and ESTRA Consortia (2024). Multimodal investigations of structural and functional brain alterations in anorexia and bulimia nervosa and their relationships to psychopathology. *Biological psychiatry*, S0006-3223(24)01759-1. Advance online publication. https://doi.org/10.1016/j.biopsych.2024.11.008

Desrivières, S., Miller, A., Mathey, C.M., **Yu, X.**, Chen, D., Agunbiade, K., Heilmann-Heimbach, S., Forstner, A.J., Schumann, G., Hoffmann, P., Nöthen, M.M., on behalf of the environMENTAL consortium. Multi-omics analyses of the environMENTAL project provide insights into mental health and disease. *Nature Mental Health* 2, 1131–1133 (2024). https://doi.org/10.1038/s44220-024-00317-y

Yu, X., & Desrivières, S. (2023). Altered anticipatory brain responses in eating disorders: A neuroimaging meta-analysis. *European eating disorders review: the journal of the Eating Disorders Association, 31*(3), 363–376. https://doi.org/10.1002/erv.2967

Yu, X., Liao, K., Turetsky, B. I. & Wang, K. (2022). Semantic processing features and schizotypal traits: A test-retest study. *International journal of psychophysiology: official journal of the International Organization of Psychophysiology, 178*, 1–8. https://doi.org/10.1016/j.ijpsycho.2022.06.002

Yu, C.#, **Yu, X.#**, Fan, Z., Wang, K. & Littleton, H. (2022). Development and Validation of a BMI-Based Figure Rating Scale for Chinese Adolescents. *Evaluation & the health professions, 45*(2), 215–219. https://doi.org/10.1177/0163278720926714

Wang, K., **Yu, X.,** Yu, C., Liu, Y., Chu, M., Zhang, R., Liang, R., Chen, J., Littleton, H., Shum, D. & Chan, R. (2022). Validation of the Chinese Version of the Body Image Concern Inventory. *Evaluation & the health professions, 45*(2), 204–214. https://doi.org/10.1177/0163278720979651

Yu, X., Liao, K., Niu, Z., Wang, K., Cheung, E., Li, X. & Chan, R. (2020). Resting frontal EEG asymmetry and schizotypal traits: a test-retest study. *Cognitive neuropsychiatry, 25*(5), 333–347. https://doi.org/10.1080/13546805.2020.1800448

Wang, K., Liang, R., **Yu, X.**, Shum, D., Roalf, D & Chan, R. (2020). The thinner the better: Evidence on the internalization of the slimness ideal in Chinese college students. *PsyCh journal, 9*(4), 544–552. https://doi.org/10.1002/pchj.346

Yu, C., **Yu. X.,** Liang, R., Fan, Z., Wang, M., Wang, K. & Yang, X. (2020). Media image and body image in adolescents. *Chinese Journal of Health Management, 14*(02): 177-180. http://doi.org/10.3760/cma.j.cn115624-20191118-00500

Fan, Z., **Yu, X.**, Yu, C., Liang, R. & Wang, K. (2020). Weight control behaviors and their association with real and perceived weight status among 1,026 first year high school students in Lanzhou. *Chinese Journal of Child Health Care*. http://doi.org/10.11852/zgetbjz2019-1708

Yu, X., Tan, S., Wang, K. & Chan, R. C. (2019). A review of applications of resting-state electroencephalography in schizophrenia research. *Chinese Mental Health Journal, 33(*05): 349-354. http://doi.org/10.3969/j.issn.1000-6729.2019.05.006

Under review:

Yu, X., Xiang, S., Jia, T., Zhang, Z., Sun, Y., Banaschewski, T., Barker, G. J., Bokde, A. L. W., Flor, H., Grigis, A., Garavan, H., Gowland, P., Heinz, A., Brühl, R., Martinot, J.-L., Paillère Martinot, M. L., Artiges, E., Nees, F., Orfanos, D. P., Lemaître, H., Paus, T., ... IMAGEN Consortium. BMI trajectories during adolescence: associations with brain maturation and DNA methylation.

Qian, L.#, Shi, R.#, **Yu, X.#**, Chen, D., Banaschewski, T., Barker, G. J., Bokde, A. L. W., Flor, H., Grigis, A., Garavan, H., Gowland, P., Heinz, A., Brühl, R., Martinot, J.-L., Paillère Martinot, M. L., Artiges, E., Nees, F., Orfanos, D. P., Lemaître, H., Paus, T., ... IMAGEN Consortium. Genome-wide multi-omics analyses reveal causal transdiagnostic molecular mechanisms for neuropsychiatric disorders across adolescence.

Chen, D., **Yu, X.**, Cheng, W., Wang, L., Xiang, S., Zhang, W., Banaschewski, T., Barker, G. J., Bokde, A. L. W., Flor, H., Grigis, A., Garavan, H., Gowland, P., Heinz, A., Brühl, R., Martinot, J.-L., Paillère Martinot, M. L., Artiges, E., Nees, F., Orfanos, D. P., Lemaître, H., Paus, T., ... ENIGMA Epigenetics Working Group. A longitudinal DNA methylation atlas and its link to brain structure and mental health.

Chen, D., **Yu, X.**, Miller, A., Mathey, C.M., Forstner, A.J., Robinson, L., Zhang, Z., Rabelo-da-Ponte, F. D., Wang L., Xiang S., Li, Y., Qian, L., Shi, R., Banaschewski, T., Bokde, A. L. W., Flor, H., Grigis, A., Garavan, H., Gowland, P., Heinz, A., Brühl, R., Martinot, J.-L., Paillère Martinot, M. L., Artiges, E., Nees, F.,… ENIGMA Epigenetics Working Group. The longitudinal epigenetic basis of major depressive disorder: Insights into Brain Maturation and environmental influences.

In preparation:

Yu, X., Desrivières, S., ENIGMA-Epigenetics Working Group, et al. Epigenome-wide associations between DNA methylation, psychopathology, gene expression, and subcortical brain structure.

Yu, X., Desrivières, S., ENIGMA-Epigenetics Working Group, et al. Epigenome-wide associations between DNA methylation and human cortical cortex and their implications in neurodegenerative and psychiatric disorders.

CONFERENCES

Desrivières, S., **Yu, X.** (2024). Epigenome-wide association studies identify biological mechanisms and genes conferring vulnerability to mental illness in adolescence. *Biological psychiatry, 95*(10): S57. https://doi.org/10.1016/j.biopsych.2024.02.142

Yu, X. et al. (2023). Disordered eating behaviours and their relations to trajectories of internalising and externalising problems and brain development during adolescence. Oral presentation at the International Conference on Eating Disorders (ICED) in Washington, District of Columbia, USA.

Yu, X. et al. (2023). Epigenome-wide association studies as a tool to identify biological mechanisms and genes conferring vulnerability to mental health symptoms. Poster presentation at the epigenetic inheritance symposium at Zurich, Switzerland.

Yu, X., Liao, K., Wang, K. & Chan, R. C. (2019). The test-retest reliability of N400. *Proceedings of 22nd National Academic Congress of Psychology*.

Yu, X., Liao, K., Niu, Z., Wang, K., Li, X. & Chan, R. C. (2018). Correlation analysis of schizotypal traits and EEG power spectra in resting state. *Proceedings of 21st National Academic Congress of Psychology*.

RESEARCH SKILLS

Neuroimaging analyses: preprocessing and quality control of neuroimaging data, formal structural and functional MRI analysis, longitudinal neuroimaging analysis

Omics analyses: preprocessing and quality control of genotyping and DNA methylation data, genotype imputation, polygenic score calculation, genome-wide and epigenome-wide association analysis (GWAS and EWAS), meta-analysis, genomic structural equation modelling (genomic SEM), functional annotation, enrichment analysis, Mendelian randomisation, colocalisation analysis

Longitudinal data analyses: structural equation modelling (such as mixed growth curve modelling, latent growth curve modelling, latent class analysis, and factor analysis), mixed linear models, generalised additive models (GAM)

Software and programming: Proficient in R, MATLAB (SPM12/CAT12), PLINK, Mplus; familiar with Python and STATA.

Teamwork and leadership: Strong experience in international and interdisciplinary research collaborations (across IMAGEN, STRATIFY and ESTRA consortia; ENIGMA-Epigenetics Woking Group), led and conducted analyses across various cohorts, skilled in managing and analysing large-scale datasets

AWARDS

King's-China Scholarship Council PhD Scholarship (incl. full tuition fee and 75,000 USD; 2021-2025)
National Scholarship in China (3000 USD; awarded to top 5% students; 2019-2020)
First Prize Scholarship at IPCAS (1000 USD; awarded to top 10% students; 2018-2019)
Merit student at IPCAS (2018-2021)
Excellent Graduate (awarded to top 5% graduates; 2018)
Merit student at PKU (2014-2018)
Second Scholarship at PKU (800 USD; 2016-2018)

OTHER

Graduate teaching assistant (GTA)   *Feb-Apr 2022*

- *Assisted in the Psychological Approaches to Treatment module, for Developmental Psychology and Psychopathology MSc*