Email: Xiaotong.Song@uky.edu

XIAOTONG (ANTHONY) SONG, M.A.

Curriculum Vitae

CONTACT INFORMATION

503 Library Drive, Kastle Hall Room 111J Lexington, KY 40506

ORCID: 0009-0001-3561-5852

EDUCATION

08/2024-Doctor of Philosophy (Ph.D.), Clinical Psychology

University of Kentucky, Lexington, KY

Major Area of Study: Clinical Neuropsychology Advisors: Jordan P. Harp, Ph.D., Justin E. Karr, Ph.D.

Master of Arts (M.A.), General Psychology, Clinical Track 09/2019-05/2021

New York University, New York, NY

Advisors: Kathy F. Yates, Ph.D., Elizabeth A. Bauer, Ph.D.

09/2015-05/2019 Bachelor of Arts (B.A.), Psychology

Skidmore College, Saratoga Springs, NY

Advisor: Denise L. Evert, Ph.D.

FELLOWSHIPS/GRANTS RECEIVED

05/2023 NYU Langone ADRC REC Junior Scholar Grant (P30 AG066512; \$1,500)

NYU Wasserman Center for Career Development Internship Grant (\$1,000) 07/2020

PUBLISHED PEER-REVIEWED MANUSCRIPTS

- Weerasekera, A., Coelho, D.R.A., Ratai, E.-M., Collins, K.A., Hurtado Puerto, A.M., De Taboada, L., Gersten, M.B., Clancy, J.A., Hoptman, M.J., Irvin, M.K., Sparpana, A.M., Sullivan, E.F., Song, X., Adib, A., Cassano, P., & Iosifescu, D.V. (2024). Dose dependent effects of transcranial photobiomodulation on brain temperature in patients with major depressive disorder: A spectroscopy study. Lasers in Medical Science, 39(1), 249. https://doi.org/10.1007/s10103-024-04198-6
- Gaggi, N.L., Roy, N.L., Song, X., Peterson, A.L., Iosifescu, D.V., Diaz-Arrastia, R., Cassano, P., & Kim, J.J. (2024). Transcranial photobiomodulation and chronic traumatic brain injury. *Photonics*, 11(3), 260. https://doi.org/10.3390/photonics11030260
- Iosifescu, D.V., Song, X., Gersten, M.B., Adib, A., Cho, Y., Collins, K.M., Yates, K.F., Hurtado-Puerto, A.M., McEachern, K.M., Osorio, R.S., & Cassano, P. (2023). Protocol report on the transcranial photobiomodulation for Alzheimer's Disease (TRAP-AD) study. Healthcare, 11(14), 2017. https://doi.org/10.3390/healthcare11142017

ABSTRACTS & POSTER PRESENTATIONS

- Figueredo, F., Chen, J., Gaggi, N., Jacobs, T., Song, X., Silva-Albornoz, G., Gonzalez, M., Gills, J., Ramos-Cejudo, J., Ayappa, I., Kam, K., Mullins, A., Parekh, A., Varga, A., Bubu, O., Blessing, E., Fieremans, E., & Osorio, R. (2025, April 7). Associations of diffusion tensor imaging (DTI), diffusion kurtosis imaging (DKI), and standard model imaging (SMI) metrics with obstructive sleep apnea severity in cognitively unimpaired subjects [Abstract]. Aging, Dementia, and Behavioral Neurology: Imaging in Dementia. https://doi.org/10.1212/WNL.0000000000209026
- Gaggi, N.L., Collins, K.A., Hurtado, A.M., Song, X., Parincu, Z., Evans, K., Gersten, M.B., Peterson, A.,

- Osorio, R.S., Castellanos, F.X., Cassano, P., & Iosifescu, D.V. (2023, December 3-6). The effects of transcranial photobiomodulation on regional intrinsic brain activity in early Alzheimer's Disease [Abstract] [Hot Topic Poster Presentation]. 62nd Annual American College of Neuropsychopharmacology (ACNP) Conference, Tampa, Florida, USA.
- Gaggi, N.L., Song, X., Collins, K.A., Hurtado, A.M., Parincu, Z., Evans, K., Gersten, M.B., Peterson, A., Osorio, R.S., Castellanos, F.X., Cassano, P., & Iosifescu, D.V. (2023, October 25). The effects of single-dose transcranial photobiomodulation on regional intrinsic brain activity and global cognition in MCI and early Alzheimer's disease [Abstract] [Poster Presentation]. 5th Annual Psychiatry Research Day, NYU Langone Health, New York City, New York, USA.
- Wu, L., Iosifescu, D.V., Raio, C., Vittala, A., Liebers, D.T., Tell, E., Song, X., Gouda, A., & Glimcher, P. (2023, October 25). The decisional reference point, the computational instantiation of reward expectation, predicts severity of depression [Abstract] [Poster Presentation]. 5th Annual Psychiatry Research Day, NYU Langone Health, New York City, New York, USA.
- Vieira, W., Cassano, P., Hurtado-Puerto, A.M., Gersten, M.B., De Taboada, L., Clancy, J.A., Irvin, M.K., Sparpana, A., Sullivan, E., Song, X., Adib, A., McEachern, K.M., Funes, C., Camprodon, J., & losifescu, D.V. (2023, January 1). Transcranial photobiomodulation in major depressive disorder: dose-dependent effects on depression and anxiety scores [Abstract]. Brain Stimulation, 16(1), 360-361. https://doi.org/10.1016/j.brs.2023.01.701
- Weerasekera, A., Ratai, E., Dmochowski, J., Collins, K.A., Hurtado, A.M., De Taboada, L., Gersten, M.B., Clancy, J.A., Hoptman, M.J., Irvin, M.K., Sparpana, A., Sullivan, E., Song, X., Adib, A., Cassano, P., & Iosifescu, D.V. (2022, December 4-7). P325. Dose dependent effects of transcranial photobiomodulation on brain temperature in major depression [Abstract] [Poster Presentation]. 61st Annual American College of Neuropsychopharmacology (ACNP) Conference, Phoenix, Arizona. USA. http://dx.doi.org/10.1038/s41386-022-01485-0
- Cassano, P., Hurtado, A.M., Collins, K., Gersten, M.B., De Taboada, L., Clancy, J.A., Irvin, M., Sparpana, A., Sullivan, E., Song, X., Adib, A., McEachern, K.M., Funes, C.J., Camprodon, J.A. & Iosifescu, D.V. (2022, April 28-30). P295. Transcranial photobiomodulation in major depressive disorder: dose dependent effects on MADRS score [Abstract] [Poster Presentation]. 77th Annual Society of Biological Psychiatry (SOBP) Conference, New Orleans, Louisiana, USA. https://doi.org/10.1016/j.biopsych.2022.02.531
- Iosifescu, D.V., Collins, K., Hurtado, A.M., Dmochowski, J.P., De Taboada, L., Irvin, M.K., Sparpana, A., Sullivan, E., Song, X., Adib, A., Clancy, J.A., Gersten, M.B., McEachern, K.M., & Cassano, P. (2022, April 28-30), P374, Specific parameters of transcranial near infrared light modulate its impact on cerebral blood flow [Abstract] [Poster Presentation]. 77th Annual Society of Biological Psychiatry (SOBP) Conference, New Orleans, Louisiana, USA. https://doi.org/10.1016/j.biopsych.2022.02.610
- Cassano, P., Hurtado, A.M., Collins, K., Gersten, M.B., De Taboada, L., Clancy, J.A., Irvin, M., Sparpana, A., Sullivan, E., Song, X., Adib, A., Camprodon, J., & Iosifescu, D.V. (2021, December 5-8), P280. Dose dependent effects of transcranial photobiomodulation on depression severity in major depressive disorder [Abstract] [Poster Presentation]. 60th Annual American College of Neuropsychopharmacology (ACNP) Conference, San Juan, Puerto Rico. https://doi.org/10.1038/s41386-021-01237-6
- Iosifescu, D.V., Dmochowski, J.P., Collins, K., Hurtado, A.M., De Taboada, L., Hoptman, M.J., Irvin, M., Sparpana, A., Sullivan, E., Song, X., Adib, A., Clancy, J.A., Gersten, M.B., & Cassano, P. (2021, December 5-8). P286. Dose dependent effects of transcranial photobiomodulation on brain hemodynamics in major depression [Abstract] [Poster Presentation]. 60th Annual American College of Neuropsychopharmacology (ACNP) Conference, San Juan, Puerto Rico. https://doi.org/10.1038/s41386-021-01237-6
- Song, X., & Evert, D.L. (2020, April 24). The examination of attentional biases and priming effects in cognitive task performance in individuals who spent time with dementia patients [Poster Presentation]. 24th Annual NYU GSAS M.A. Psychology Research Conference, New York City, New York, USA.
- Song, X., & Evert, D.L. (2019, May 1). The examination of attentional biases and priming effects in cognitive task performance in individuals who spent time with dementia patients [Abstract] [Poster

Presentation]. 21st Annual Skidmore College Academic Festival, Saratoga Springs, New York, USA.

Fang, K., Yoon, E., Jessel, V., Song, X., & Li, M. (2017, August 3-6). Context-specific social pathways toward life satisfaction among eastern Asian international students [Abstract] [Poster Presentation]. Division 52, 125th Annual American Psychological Association (APA) Convention, Washington, DC, USA.

RESEARCH EXPERIENCES

08/2025-**Graduate Research Assistant**

University of Kentucky Sanders-Brown Center on Aging

Department of Neurology Mentor: Jordan P. Harp, Ph.D.

Research Education Component (REC) Junior Scholar 05/2023-06/2024

NYU Langone Alzheimer's Disease Research Center (ADRC)

Center for Cognitive Neurology Department of Neurology

Mentors: Ricardo Osorio, M.D., Rebecca Betensky, Ph.D.

Independent Research Projects:

- 1. Examination of Global Grey vs. White Matter ¹¹C-Pittsburgh Compound B (PiB) Standard Uptake Volume Ratio (SUVR) Abnormalities in PET Scans of Individuals with Obstructive Sleep Apnea (OSA)
- 2. Examination of Relationship between OSA Severity & Hippocampal Cerebrovascular Reactivity to Carbon Dioxide (CVRco2)

05/2022-06/2024 05/2021-05/2022

Assistant Research Scientist

Research Data Associate

NYU Grossman School of Medicine

Department of Psychiatry

Mood Disorders and Cognition Research Program

Pls: Dan V. Iosifescu, M.D., M.Sc., Ricardo Osorio, M.D.

Responsibilities: manage and conduct multiple clinical trials/research studies in Alzheimer's Disease (AD) and mood disorders, run participant study visits, conduct vital signs checks and venipunctures, compose and submit study IRB documents and modifications, compose and submit study reports to NIH and FDA, organize and host meetings for data safety monitors, oversee all study financial operations, assist in writing study grants and budgets, train and manage study team members, provide neuropsychological assessment administration training to externs;

List of trials I managed and ran:

- Transcranial Photobiomodulation for Alzheimer's Disease (TRAP-AD; NIH-NIA R01-NCT04784416; PI: Dan Iosifescu, M.D., M.Sc.);
- Transcranial Near Infrared Radiation and Cerebral Blood Flow in Depression (TRIADE; NIH R33-NCT05573074, R61-NCT04366258; PI: Dan Iosifescu, M.D., M.Sc.);
- A Pilot, Phase II, Open-Label, Single-Center Study of Sodium-Glucose Cotransporter-2 Inhibitor Empagliflozin in Major Depressive Disorder (SGLT2-MDD; ASCP NCT05757791; PI: David T. Liebers, M.D., M.Phil., M.P.P.);
- A Single-Center Observational Study of Reference Point Setting in Major Depressive Disorder (RESET-MDD; NIMH; PI: Paul Glimcher, Ph.D.);
- Sequential Multiple Assignment Randomized Trial for Bipolar Depression (SMART-BD; PCORI; PI: Andrew A. Nierenberg, M.D.);
- Augmentation versus Switch: Comparative Effectiveness Research Trial for Antidepressant Incomplete and Non-responders with Treatment Resistant Depression (ASCERTAIN-TRD; PCORI NCT02977299; PI: George I. Papakostas, M.D.).

05/2020-05/2021

Master's Thesis

NYU Graduate School of Arts and Sciences

Department of Psychology

Title: CNS-VS vs. "Traditional" Battery: The Examination of Psychometric Properties Advising faculty: Kathy F. Yates, Ph.D., Elizabeth A. Bauer, Ph.D.

- Investigated the psychometric properties of a prevalent computer-based neuropsychological assessment battery, CNS-Vital Signs (CNS-VS), when it is used to assess the cognitive functions of a clinically obese adolescent population;
- Responsibilities: searched and reviewed relevant literature, selected thesis topic, formulated hypotheses for statistical analyses, cleaned and analyzed data via Python and SPSS, wrote and defended thesis paper.

01/2020-05/2021

Graduate Research Assistant

NYU Grossman School of Medicine

Department of Psychiatry

Brain, Obesity, and Diabetes Laboratory (BODyLab)

Research Supervisors: Kathy F. Yates, Ph.D., Antonio J. Convit, M.D.

- Administered study-dedicated neuropsychological assessment batteries (e.g., CVLT-II) to participants with obesity and Type 2 Diabetes Mellitus (T2DM);
- Scored assessment batteries, cleaned and managed data, and recruited participants;
- Assisted in study: Modifiable Cardiovascular Factors Linking Type 2 Diabetes and Alzheimer's Disease (R01; PI: Antonio J. Convit, M.D.).

11/2019-04/2020

Graduate Research Assistant

NYU Grossman School of Medicine

Department of Neurology

Research Supervisor: Alexander B. Chervinsky, Ph.D., ABPP-CN

- Programed experiment apparatuses for a new computerized neuropsychological assessment tool using Python and PsychoPy;
- Administered study-dedicated neuropsychological assessment batteries (e.g., TOMM) to clinical participants hospitalized in the Epilepsy Monitoring Center, scored assessment batteries, managed data, and recruited participants;
- Assisted in study: Pilot Study of New Computer-Based Neuropsychological Tool: Visual Tests, Touch Responses (PI: Alexander B. Chervinsky, Ph.D., ABPP-CN).

02/2018-05/2019

Undergraduate Honors Thesis

Skidmore College

Department of Psychology

Title: Examination of Attentional Biases and Priming Effects in Cognitive Task Performance Advising faculty: Denise L. Evert, Ph.D.

- Investigated the effects of attentional biases and priming tasks on cognitive task performance in individuals who spent time with dementia patients;
- Responsibilities: searched and reviewed literature, selected thesis topic, formulated hypotheses for statistical analyses, designed experiment apparatuses via PsychoPy, wrote IRB applications, conducted experiments, trained and managed first-year undergraduate research team members on experiment administration, gathered and analyzed data via PsychoPy and SPSS, wrote and defended thesis paper, presented thesis posters.

12/2017-05/2019

Undergraduate Research Assistant

Skidmore College

Department of Psychology

Research Supervisor: Denise L. Evert, Ph.D.

Conducted literature reviews on the topic of hemispheric lateralization and participated in research lab meetings;

- Conducted experiments using PsychoPy to examine psychomotor processing speed and performed data analyses via SPSS;
- Assisted in study: Examination of Hemispheric Lateralization Effects of Emotion Regulation Strategies on Cognitive Task Performance (PI: Denise L. Evert, Ph.D.).

02/2016-09/2017

Undergraduate Research Assistant

Skidmore College

Department of Psychology

Research Supervisor: Ke Fang, Ph.D.

- Conducted literature reviews in the fields of social and cross-cultural psychology and participated in research lab meetings;
- Collected data on anxiety and life satisfaction and performed data analyses via SPSS;
- Assisted in study: Examination of Effects that Social Acculturation, Enculturation, and Social Anxiety Have on East Asian Students' Life Satisfaction at Skidmore College (PI: Ke Fang, Ph.D.).

DOCTORAL PRACTICUM TRAINING EXPERIENCE

08/2025-

University of Kentucky Counseling Center

University of Kentucky Office for Student Success Supervisor: Amber Carter, Psy.D.

- Conduct intake assessment, suicide risk assessment, and individual therapy sessions to students enrolled at University of Kentucky;
- Assist in group therapy sessions as a process observer;
- Attend individual supervision, group therapy preparation and debriefing sessions, practicum seminars, and case presentations.

OTHER CLINICAL & TRAINING EXPERIENCES

05/2021-06/2024

Administration of Structured Neuropsychiatric Interviews for Clinical Research

NYU Grossman School of Medicine

Department of Psychiatry

Mood Disorders and Cognition Research Program

Supervisors: Kate Collins, Ph.D., LCSW, Dan V. Iosifescu, M.D., M.Sc.

- Tests/batteries administered: MINI, IDS-C, MADRS, CGI-I & S, C-SSRS, ATRQ, SHAPS, STAI, BDI-II, QIDS, Q-LES-Q, ASQ, GDS, Neuro-QoL, SAFTEE-SI, CAST-IRR, ESS, ISI, PCQ, PSQI;
- Population: adults with Major Depressive Disorder (MDD), Bipolar Disorder.

11/2019-06/2024

Administration of Neuropsychological Assessment Batteries for Clinical Research

NYU Grossman School of Medicine

Departments of Psychiatry and Neurology

Supervisors: Kathy F. Yates, Ph.D., Alexander B. Chervinsky, Ph.D., ABPP-CN

- Tests/batteries administered: NACC's UDS-3 battery, ACE-III, RBANS Update, CVLT-II, computerized WCST, MoCA, MMSE, Anna Thompson Logical Memory, NAART35, Letter & Pattern Comparison Task, Stroop, FNAME-12, Trail Making Task A & B, Benson Complex Figure, MINT, Phonemic & Category Fluency, COWAT, RIST-II (GWH & OIO), Judgment of Line Orientation, DSST, SDMT, NV-MSVT, DVT, TOMM, **Boston Naming Test:**
- Population: adults with Alzheimer's Disease (AD), Obstructive Sleep Apnea (OSA), Epilepsy, Type 2 Diabetes Mellitus (T2DM).

05/2018-09/2018 **Clinical Neuropsychology Extern**

Capital Medical University, Xuanwu Hospital, Beijing, P.R.C.

Department of Neurology

Neural-Cognitive Screening Center

Clinical Supervisors: Lina Zhao, M.D., Ph.D., Hongmei Jin, Ph.D.

- Trained on and administered several neuropsychological assessment batteries (e.g., MoCA) under supervision on patients with suspected AD pathology;
- Observed clinical administration of Clinical Dementia Rating and Global Deterioration Scale, and participated in interdisciplinary diagnostic consensus meetings.

TEACHING EXPERIENCE

08/2024-05/2025 **Graduate Teaching Assistant**

Department of Psychology University of Kentucky

> Responsibilities: teach two 2-hour lab sessions per week and an 80-minute lecture on Late Adulthood Cognitive Development and Diseases, grade weekly homework, lab assignments, and papers, hold office hours, proctor and grade exams;

Courses:

- PSY 216: Applications of Statistics in Psychology
- PSY 323: Developmental Psychology

PROFESSIONAL CERTIFICATIONS

1 101 20010	NAL SERTI IOATIONS
10/2024	National Child Traumatic Stress Network: Psychological First Aid (PFA)
	 Certified to apply PFA principles to help individuals and families in the immediate aftermath of disaster and terrorism
10/2024	ZEROSuicide Institute: Counseling on Access to Lethal Means
	- Certified to perform Means Restriction/Reduction counseling to reduce suicide risks
09/2022	CUNY BMCC: EKG and Phlebotomy for Health Professionals
	 Certified to perform venipuncture, electrocardiogram, and vital signs checks (e.g., hear rate, blood pressure, body temperature)
10/2021	Research Foundation for Mental Hygiene: C-SSRS Training
	 Certified to conduct suicide risk assessments using Columbia-Suicide Severity Rating Scale (C-SSRS)
06/2021	American Institute of Medical Laser Applications: Medical Laser Safety with Dr. Robert Splinter
	- Trained on the topics of medical laser safety and safe operations of medical lasers
05/2021	NYU Langone Health: EPIC Electronic Medical Record System
	 Certified to order medical tests and neuroimaging procedures on NYU Langone's EPIC medical record system
05/2020	NYU Langone Health: Operation and Clinical-Research Use of MagVenture rTMS for MDD
	 Certified to perform cortical brain mapping and operate MagVenture repetitive Transcranial Magnetic Stimulation (rTMS) device for both clinical treatments and

05/2020 NYU Langone Health: Operation and Research Use of LiteCure's tPBM-2.0

research

Certified to operate LiteCure's transcranial Photobiomodulation (tPBM-2.0) device for research

HONORS, AWARDS & PROFESSIONAL AFFILIATIONS

08/202	25	Program Representative, Graduate Student Congress (GSC), University of Kentucky
11/202	23	Recipient, $2^{\rm nd}$ Place Award, Top 3 Best Poster Contest, $5^{\rm th}$ Annual Psychiatry Research Day, NYU Langone Health
04/202	23	Affiliate, Asian Neuropsychological Association (ANA)
03/202	21	Inductee, The International Honor Society in Psychology (Psi Chi), NYU Chapter
06/202	20	Group Representative, Association of Neuropsychology Students and Trainees (ANST), NYU Chapter, APA Division 40
05/202	20	Student Affiliate, APA Division 40, Society of Clinical Neuropsychology (SCN)
04/202	20	Recipient, 3 rd Place Award (\$100), Blue Room, 24 th Annual NYU Graduate School of Arts and Science (GSAS) M.A. Psychology Research Conference
10/201	9	Advocacy Chair, NYU GSAS Graduate Student Council
05/201	9	Recipient, Departmental Honors in Psychology, Skidmore College
03/201	9	Inductee, The International Honor Society in Psychology (Psi Chi), Skidmore Chapter
05/201	6	Dean's List, Skidmore College

NOTABLE SKILLS AND ABILITIES

Software:

- Fluent in: R, Python, SPSS, PsychoPy, Acquire EDC, REDCap, Titanium
- Familiar with: FreeSurfer, Visage, MRtrix3, Xnat, Big Purple, Mathematica, MATLAB

Language:

Bilingual in English and Mandarin, beginner Spanish (CEFR A2)

REFERENCE

Jordan P. Harp, Ph.D.

Associate Professor of Neurology

Neuropsychologist and Director of Neuropsychology Fellowship Program

Kentucky Neuroscience Institute and Sanders-Brown Center on Aging

University of Kentucky College of Medicine

jordanharp@uky.edu

https://ukhealthcare.uky.edu/doctors/jordan-harp

Relationship: Research mentor and advisor