

Ya-Wen (Yama) Chang

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I am a PhD researcher developing AI-driven systems for real-time mental health support, with a focus on agentic LLM systems, just-in-time adaptive interventions (JITAs), and multimodal behavioral sensing. My interdisciplinary background in clinical psychology, computational methods, and data science shapes how I design technology-guided mental health systems.

Education

Geisel School of Medicine, Dartmouth College

Hanover, NH

Ph.D. in Quantitative Biomedical Science & Center for Technology and Behavioral Health

Sep. 2024 –

- **Advisor:** Nicholas Jacobson (AI and Mental Health: Innovation in Technology-Guided Healthcare Laboratory)
- **Coursework:** Machine Learning; Algorithms; AI for Wearable Neurotech; Applied Biostatistics; Analysis of Densely Collected Longitudinal Data; Bioinformatics

Teachers College, Columbia University

New York, NY

M.A. in Clinical Psychology, Concentration in Quantitative Methods (GPA: 4.0/4.0)

Sep. 2018 – Mar. 2020

National Taiwan University

Taipei, Taiwan

B.A. in Economics

Sep. 2008 – Feb. 2012

Selected Publications

[Google Scholar Profile](#)

* indicates equal contribution

- [J1] Sotomayor, I., **Chang, Y.**, Szkody, E., Fox, K., & Schleider, J. (2026). A digital, minority stress-focused single-session intervention benefits multiply-minoritized sexual minority adolescents. *Journal of Clinical Child & Adolescent Psychology*.
- [J2] **Chang, Y.**, Sotomayor, I., Szkody, E., Fox, K., & Schleider, J. (2025). Effectiveness of an online single-session minority stress intervention: No evidence for variation by structural stigma, internalized stigma, or social support. *SSM–Mental Health*, 100409.
- [J3] Brown, V., Gujral, S., **Chang, Y.**, Galfalvy, H., Szanto, K., & Dombrovski, A.Y. (2025). Brain volume reductions and relationship with depression and cognitive functioning in suicide in older adults: A cross-sectional and longitudinal study using Bayesian multilevel modeling. *Biological Psychiatry: Global Open Science*.
- [J4] Paine, E., Abad, M., Barucco, R., **Chang, Y.**, Navalta, T., Vance, T., Ehrhardt, A., & Bockting, W. (2025). “Too much trouble”: Transgender and nonbinary people’s experiences of stigmatization and stigma avoidance in the workplace. *Work and Occupations*. <https://doi.org/10.1177/07308884241268705>
- [J5] **Chang, Y.***, Schumacher, E.*, Martino, R., Maheux, A., Choukas-Bradley, S., Salk, R., & Thoma, B. (2024). Structural homophobia and suicidal ideation and behavior among sexual and gender minority adolescents. *Stigma and Health*. <https://doi.org/10.1037/sah0000576>
- [J6] Szkody, E., **Chang, Y.**, & Schleider, J.L. (2023). Serving the underserved? Uptake, effectiveness, and acceptability of digital SSIs for rural American adolescents. *Journal of Clinical Child and Adolescent Psychology*.
- [J7] **Chang, Y.**, Buerke, M., Galfalvy, H., & Szanto, K. (2023). Childhood trauma is associated with early-onset but not late-onset suicidal behavior in late-life depression. *International Psychogeriatrics*, 1–14. PMID: 37642013
- [J8] Galfalvy, H., Szücs, A., **Chang, Y.**, Buerke, M., & Szanto, K. (2023). Long-term suicidal ideation profiles in late-life depression and their association with suicide attempt or death by suicide. *The Journal of Clinical Psychiatry*, 84(2), 22m14469. PMID: 36791367

MANUSCRIPTS UNDER REVIEW

- [R1] Szkody, E., Hobaica, S., Jans, L., Bergstrom, T., **Chang, Y.**, Smith, A.C., & Schleider, J.L. (R&R). Structural stigma and LGBTQ+ youth mental health.

MANUSCRIPTS IN PREPARATION

- [P1] **Chang, Y.**, Han, H.J., Griffin, T.Z., Marsch, L., Heinz, M.V., Campbell, A.T., & Jacobson, N.C. (In Preparation). Reliability of an agentic LLM JITA engine for evidence-based interventions from passive sensing.
- [P2] **Chang, Y.**, Heinz, M.V., Griffin, T.Z., Nemesure, M.D., Lekkas, D., Pillai, A., Collins, A.C., Nepal, S., Mackin, D.M., Price, G.D., Campbell, A.T., & Jacobson, N.C. (In Preparation). The digital balance: Using passive sensing of online and in-person social behavior to model daily depressive symptoms.

Experiences

Dartmouth College

Hanover, NH

PhD Researcher, AIM HIGH Lab (AI and Mental Health), advised by Nicholas Jacobson

Sep. 2024 – Present

Lead research on Evergreen, a generative AI system for just-in-time adaptive mental wellbeing interventions using multimodal behavioral sensing and conversational AI. Design context-aware decision engines that infer intervention timing from multimodal behavioral signals, including mobility, sleep, stress, and screen activity. Develop LLM-based and multi-agent pipelines for state detection, intervention selection, and safe tool-augmented delivery in real-world settings.

Northwestern University

Chicago, IL

Data Scientist, Lab for Scalable Mental Health, mentored by Jessica Schleider

Sep. 2022 – Aug. 2024

Applied machine learning and advanced statistical methods to digital mental health interventions and minority mental health research. Performed data visualization and analysis using R and Python (e.g., time-series modeling, hierarchical linear modeling, confirmatory factor analysis, and mediation/moderation analysis). Developed and visualized a county-level structural stigma index in the U.S. using large-scale open datasets (600,000+ records). Served as a statistical consultant to doctoral students and research coordinators.

University of Pittsburgh School of Medicine

Pittsburgh, PA

Senior Research/Data Analyst, Department of Psychiatry, PI: Katalin Szanto

Sep. 2020 – Aug. 2022

Led independent research projects on late-life suicide and depression, from conceptualization through analysis to first-authored manuscripts and conference presentations. Built statistical models using R for classification and prediction. Mentored a junior research assistant whose work led to a co-first-authored publication. Generated data-driven reports using R Markdown to inform recruitment practices for a case-control study, reducing the gender gap to only 8%. Cleaned and prepared open datasets for sharing to NIMH Data Archive.

Columbia University Irving Medical Center

New York, NY

Research Intern, Program for the Study of LGBT Health, PI: Walter Bockting

Sep. 2018 – Mar. 2020

Investigated LGBTQ+ mental health through the minority stress model. Led an independent research project from conceptual framework development to quantitative data analysis, data visualization, and first-authoring a manuscript. Transcribed 26 interview scripts and used Dedoose software for qualitative coding and thematic content analysis.

Conference Presentations

SYMPOSIUM PRESENTATIONS

- [S1] **Chang, Y.**, Han, H.J., Ross, M.K., Seo, H., & Kaveladze, B. (2025, December). Building an intelligent mental health app: Integrating passive sensing, prediction, and conversational AI interventions. [Symposium presentation]. 9th Annual Technology in Psychiatry Summit (TiPS), Virtual.

- [S2] **Chang, Y.**, Sotomayor, I., Szkody, E., Fox, K., & Schleider, J.L. (2023, November). Effectiveness of an online single-session minority stress intervention: Variation by structural stigma? In Ahuvia, I., & McKetta, S. (Chairs), Price, M. (Discussant), *The role of structural stigma in psychopathology among marginalized youth*. [Symposium presentation]. 57th annual meeting of the Association of Behavioral and Cognitive Therapies, Seattle, WA.
- [S3] Sotomayor, I., **Chang, Y.**, Szkody, E., Fox, K., & Schleider, J.L. (2023, November). Intersectionality and a minority stress-based single-session intervention benefit multiply-marginalized LGBTQ+ adolescents. In A.L. Silverman & G. Ramos (Co-Chairs), A. Aguilera (Discussant), *Leveraging digital mental health interventions to increase access to care among marginalized racial and ethnic groups*. 57th annual meeting of the Association of Behavioral and Cognitive Therapies, Seattle, WA.
- [S4] Paine, E., Barucco, R., **Chang, Y.**, Navalta, T., Ehrhardt, A., & Bockting, W. (2022, April). “Too much trouble”: Transgender and nonbinary people’s experiences of stigma, discrimination, and affirmation in the workplace. Paper presented at 2022 Population Association of Americas annual conference. Atlanta, GA.
- [S5] Calati, R., Maisto, M., Miranda, R., Thompson, L., Lesanpezeshki, M., Baiden, P., Miller, C., **Chang, Y.**, Wang, P., Grzenda, A., Kirchner, S., & Clarke, D.E. (2021, October). Ethnic discrimination and suicidal thoughts and behaviors: An international-intercontinental collaborative project for a systematic review. In G. Zalsman (Chair), *IASR Metanalysis and Systematic Review Workshop Project*. Paper presented at the 2021 IASR/AFSP International Summit on Suicide Research (held virtually).

POSTER PRESENTATIONS

- [Po1] **Chang, Y.**, Brown, V., Whitman, K., Dombrovski, A., & Szanto, K. (2022, April). Hippocampal MRI volume differences in late-life suicidal behavior. Poster presented at the Society of Biological Psychiatry (SOBP) 2022 Annual Meeting.
- [Po2] Galfalvy, H., Szücs, A., Buerke, M., **Chang, Y.**, & Szanto, K. (2022, April). Long-term suicidal ideation profiles in late-life depression and their association with prospective suicide attempt and death by suicide. Poster presented at the Society of Biological Psychiatry (SOBP) 2022 Annual Meeting.
- [Po3] **Chang, Y.** & Bockting, W. (2021, November). Identity development trajectories and childhood gender role non-conformity among a gender and racial diverse sample in the United States. Poster presented at the annual meeting of the Association for Behavioral and Cognitive Therapies (held virtually).
- [Po4] **Chang, Y.**, Galfalvy, H., Buerke, M., & Szanto, K. (2021, October). Age of onset of first suicidal behavior determines risk factor profiles in older suicide attempters – Focus on childhood trauma experiences. Poster presented at the IASR/AFSP International Summit on Suicide Research (held virtually).
- [Po5] **Chang, Y.**, Brown, V., Whitman, K., Dombrovski, A., & Szanto, K. (2021, October). Hippocampal MRI volume differences in late-life suicidal behavior. Poster presented at the IASR/AFSP International Summit on Suicide Research (held virtually).
Nominated as a poster finalist (Top 10) for the Early Career Researcher Best Poster Award.
- [Po6] **Chang, Y.**, Galfalvy, H., Buerke, M., & Szanto, K. (2021, October). The relationship of childhood trauma experiences with the age of onset of first suicidal behavior in late-life depression. Poster presented at the Pitt Psychiatry Research Day. Pittsburgh, PA.
- [Po7] **Chang, Y.** & Malgaroli, M. (2021, April). Longitudinal predictors of non-suicidal self-injury among gender diverse population: Machine learning approaches. 2021 Diversifying Clinical Psychology Conference, Council of University Directors of Clinical Psychology (held virtually).
- [Po8] **Chang, Y.** & Chen, S. (2020, November). Identifying school-based intervention targets for the risk of suicide attempt amongst gender questioning youth. Poster presented at the annual meeting of the Association for Behavioral and Cognitive Therapies (held virtually).
- [Po9] Tang, S. & **Chang, Y.** (2020, August). Mental health disparities among LGBTQ Asian and Pacific Islander youth: A cross-sectional analysis. Poster presented at the American Psychological Association Convention (held virtually).

[Po10] **Chang, Y.** & Bockting, W. (2020, June). Childhood gender nonconformity and identity development among a diverse transgender community sample in the United States. Poster presented at the annual Journal of Clinical Child and Adolescent Psychology (JCCAP) Future Directions Forum (held virtually).

Invited Presentations

- [I1] **Chang, Y.** (2022, April). Career talk: Finding and interviewing for post-bacc positions as an international student. Invited talk presented at NextGen Psych Scholars Program (held virtually).
- [I2] **Chang, Y.**, Schumacher, E., & Thoma, B. (2022, April). The relationship between structural stigma and suicidal thoughts and behaviors among SGM youth. Invited talk presented at the Enrichment Meeting at Longitudinal Research Program in Late-Life Suicide at UPMC Psychiatry, Pittsburgh, PA.
- [I3] **Chang, Y.** (2021, August). The relationship of childhood trauma experiences with the age of onset of first suicidal behavior in late-life depression. Invited talk presented at the Enrichment Meeting at Longitudinal Research Program in Late-Life Suicide at UPMC Psychiatry, Pittsburgh, PA.
- [I4] Brown, V. & **Chang, Y.** (2021, April). Morphometric alterations in late-life suicide and relationships with cognitive decline. Invited talk presented at the Enrichment Meeting at Longitudinal Research Program in Late-Life Suicide at UPMC Psychiatry, Pittsburgh, PA.
- [I5] **Chang, Y.** (2021, April). Career talk: How to create a position for yourself during pandemic (as an international student). Invited talk presented at Teachers College, Columbia University, New York, NY.

Non-Peer-Reviewed Publications

- [N1] **Chang, Y.** (2022, June). Three-year anniversary of legalizing same-sex marriage in Taiwan – Has structural stigma decreased and mental health improved? *Taiwan Women ePress*, 174(2). [In Mandarin]

Teaching Experience

R Workshop

Instructor

Virtual

2021

Designed materials and developed a workshop to teach R programming for beginners. The workshop included four sessions: introduction to R, data wrangling, tidying data, data visualization, and data analysis. Slides and R scripts available on [GitHub](#).

Volunteer Experience

Taiwan LGBT Hotline Association

Crisis Counselor, supervised by Chia-Wei Shiu, MSW

Taipei, Taiwan

2017 – 2018

Answered 350+ callers and committed 15+ hours a week, including writing clinical reports and attending weekly clinical supervision. Passed a selective screening process after completing an intensive 16-week clinical training on people-centered counseling techniques, crisis management, and interventions.

Awards & Honors

- 2024 Dartmouth QBS Merit Award (\$3,000)
- 2023 Queer in STEM Scholarship (\$525)

2022 Data Science Fellowship, Correlation One
2021 Queer in STEM Scholarship (\$1,250)
2021 Poster Finalist (Top 10), IASR/AFSP International Summit on Suicide Research
2019 Program Ambassador, Dept. of Counseling and Clinical Psychology, TC, Columbia University
2019 Graduate Representative Speaker, Admitted Student Day Student Panel, TC, Columbia University
2019 Psi Chi Psychology Honors Society, TC, Columbia University
2018 Teachers College Scholarship (\$2,500, Merit-based), TC, Columbia University

Reviewing Experience

Ad-hoc Reviewing: BMC Digital Health, Paediatrics, Stigma and Health, American Journal of Public Health, Culture, Health & Sexuality

Professional Affiliations

2022 – 2024 International Society for Research on Internet Interventions (ISRII)
2019 – 2024 Association for Behavioral and Cognitive Therapies; Sexual and Gender Minority Interest Group
2018 – 2020 American Psychological Association of Graduate Students; APA Division 44