CURRICULUM VITAE

Yama (Ya-Wen) Chang, M.A.

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EDUCATION

2018 – 2020Teachers College, Columbia University
M.A. in Clinical Psychology - GPA: 4.0/4.0
Concentration in Research Methods
Master's Thesis: Childhood Gender Nonconformity and Identity Development Among a Diverse
Transgender Community Sample in the United StatesDiverse
Taipei, Taiwan
B.A. in Economics2010Stanford University
Exchange StudentPalo Alto, CA

RESEARCH INTEREST

I am interested in leveraging technology to enhance mental health care, particularly through the creation of digital interventions and human-AI collaboration tools. My aim is to design accessible, scalable, evidence-based solutions that address mental health disparities, with a special emphasis on the LGBTQ+ community. Additionally, I'm exploring the use of language models and AI to provide timely, personalized mental health support.

RESEARCH EXPERIENCES

2022 – Present Lab for Scalable Mental Health | DP5OD028123

Medical Social Sciences and Psychology, Northwestern University

Principal Investigator: Jessica Schleider, Ph.D.

Research Area: Digital mental health interventions, minority mental health, structural stigma

Data Scientist

- Led and co-authored projects, resulting in six publications/ongoing manuscripts (1 first-author, 5 second-author) in top-tier psychology journals
- Performed data visualization and advanced analysis using R and Python (e.g., machine learning, time-series modeling, hierarchical linear modeling, confirmatory factor analysis, and mediation/moderation analysis)
- Cleaned and de-identified large-scale datasets (e.g., EMA data, longitudinal datasets) to create analytical base tables and contributed to open data repositories (e.g., GitHub and OSF)
- Developed and visualized a county-level index in the U.S. using large-scale open datasets (600,000+ records) to study structural stigma towards LGBTQ+
- Spearheaded best practices for open data management, promoting transparency, reproducibility, and data integrity
- Served as a statistical consultant to doctoral students and research coordinators, providing expertise on data analysis and coding using the R programming language

2020 – 2022 Longitudinal Research Program in Late-Life Suicide | R01MH085651 Department of Psychiatry, University of Pittsburgh Medical Center

<u>Principal Investigator</u>: Katalin Szanto, M.D. <u>Research Area</u>: Suicide risk in late-life depression

Senior Research/Data Analyst

• Published two papers (1 first-author, 1 third-author) in top psychiatry journals

- Led independent research projects, including conceptualizing research questions into hypotheses, developing and applying analytic strategies, writing first authorship manuscripts, and present research findings at national and international conferences
- Built statistical models using R for classification and prediction, communicate results to investigators using informative graphics, and write co-authorship manuscripts
- Generated and present data-driven reports using R Markdown to better inform recruitment practices for case-control study, reducing the gender gap to only 8%
- Managed clinical longitudinal databases in REDCap
- Cleaned and prepared datasets for sharing to NIMH Data Archive
- Led data team of 4 individuals and oversee the training of new team members
- Led and designed a four-session R workshop to teach R programming, including introduction to R, data wrangling, tidying data, data visualization, and data analysis

$2018-2020 \qquad \textbf{Program for the Study of LGBT Health} \mid \textbf{R01HD079603}$

Division of Gender, Sexuality, & Health

Department of Psychiatry, Columbia University Irving Medical Center

Principal Investigator: Walter Bockting, Ph.D.

Research Area: LGBTQ+ mental health, minority stress model

Research Intern

- Led and co-authored projects, resulting in the submission of two manuscripts (1 first author, 1 third-author) in leading sexual/gender journals
- Led an independent research project from conceptual framework development to data analysis, data visualization, and firs-authoring our manuscript
- Transcribed 26 interview scripts and used Dedoose software for qualitative coding and thematic content analysis

PEER-REVIEWED PUBLICATIONS

- 1. 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*. [Web] [Pre-registration] [Code]
- 2. **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 [Web]
- 3. 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 [Web]

MANUSCRIPTS UNDER REVIEW

- * indicates equal contribution
- 1. Schumacher, E.*, **Chang, Y.***, Martino, R., Maheux, A., Choukas-Bradley, S., Salk, R., & Thoma, B. (Under Review). Structural Stigma and Suicidal Thoughts and Behavior Among U.S. Sexual Minority Youth.
- 2. **Chang, Y.**, Jackman, K., Dworkin, J., Singh, A., LeBlanc, A., & Bockting, W. (Under Review). Childhood Gender Nonconformity and Identity Development among a Diverse Transgender Community Sample in the United States.
- 3. Paine, E., Barucco, R., Chang, Y., Navalta, T., Ehrhardt, A., & Bockting, W. (R & R). "Too Much Trouble": Transgender and Nonbinary People's Experiences of Stigma, Discrimination, and Affirmation in the Workplace.

DRAFTED MANUSCRIPTS

- 1. **Chang, Y.**, Sotomayor, I., Szkody, E., Fox, K., & Schleider, J. L. (In Preparation). Effectiveness of an Online Single-Session Minority Stress Intervention: No Evidence for Variation by Structural Stigma or Social Support. [Pre-registration]
- 2. Sotomayor, I., Chang, Y., Szkody, E., Fox, K., & Schleider, J. L. (In Preparation). Intersectionality and a Minority Stress-Based Single-Session Intervention Benefit Multiply-Marginalized LGBTQ+ Adolescents. [Pre-registration]
- 3. Ahuvia, I., **Chang Y.**, Eberle, J., Chen, S., Shroff, A., Bringmann, L., Mullarkey, M., Schleider, J.L. Using Idiographic Symptom Networks to Predict Change in Adolescent Depression Symptoms. [Pre-registration]
- 4. Schleider, J. L., **Chang, Y.**, Friedman, S., Szkody, E., Mullarkey, M; Weisz, J. Virtual Reality and Web-Based Growth Mindset Interventions for Adolescent Depression: A Three-Arm Randomized Trial. [Pre-registration]
- 5. Grzenda, A., **Chang, Y.**, Kirchner, S., Wang, P., & Clarke, D. (In Preparation). A Systematic Review in Psychological Effects of Gender-Affirming Hormone and Surgical Treatments on Gender Diverse Youth.

CONFERENCE PRESENTATIONS

Conference Presentations

- 1. **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 to be presented at the 57th annual meeting of the Association of Behavioral and Cognitive Therapies, Seattle, WA.
- 2. 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*. Symposium to be presented at the 57th annual meeting of the Association of Behavioral and Cognitive Therapies, Seattle, WA.
- 3. 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.
- 4. 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

- 1. **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 IASR/AFSP International Summit on Suicide Research. Poster accepted at the Society of Biological Psychiatry (SOBP) 2022 Annual Meeting. [Poster]
- 2. 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 accepted at the Society of Biological Psychiatry (SOBP) 2022 Annual Meeting.
- 3. **Chang, Y.**, & Bockting, W. (2021, November). Identity Development Trajectories and Childhood Gender Role Nonconformity 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). [Poster]

- 4. **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). [Poster]
- 5. **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). [Poster]
 - Nominated as a poster finalist (Top 10) for the Early Career Researcher Best Poster Award
- 6. **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. [Poster]
- 7. 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).
- 8. **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). [Poster]
- 9. Tang, S., & Chang, Y. (2020, August). Mental health disparities among LGBTQ Asian and Pacific islander youth: A cross sectional analysis (held virtually). Poster presented at the American Psychological Association Convention.
- 10. **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). [Poster]

NON-PEER-REVIEWED PUBLICATION

1. **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] [Article]

INVITED PRESENTATIONS

- 1. **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).
- 2. **Chang, Y.**, Schumacher, E., & Brian Thoma (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.
- 3. **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. [Slide]
- 4. 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. [Slide]
- 5. **Chang, Y.** (2021, April) *Career Talk: How to create a position for yourself during pandemic (as an international student.* Invited talk presented at the Teachers College, Columbia University, New York, NY. [Slide]

2021 – 2022 Gender Minority Youth Study (GMY Study) | K01MH117142

Department of Psychiatry, University of Pittsburgh Medical Center

Principal Investigator: Brian Thoma, Ph.D.

Research Area: Structural stigma and suicide risk among SGM adolescents

Data Analyst

- Designed, curated, visualized, and analyzed data from GMY Study
- Explored the relationship between structural stigma and suicidal behaviors among sexual and gender minority (SGM) youth

$2020-2022 \qquad \textbf{IASR Meta-Analysis and Systematic Review Workgroup} \\$

Sponsored by International Academy of Suicide Research

Principal Investigator: Diana E. Clarke, Ph.D.

<u>Research Area</u>: Social determinants and health inequalities in relation to suicide risk with a focus on racial and sexual and gender minority groups

Co-Investigator

• Conducted systematic reviews under the guidelines of PROSPERO and draft manuscripts

2019 Stress and Development Laboratory

Department of Psychology, Harvard University

Principal Investigator: Katie McLaughlin, Ph.D.

Research Area: Impact of childhood adversity on neurobiological mechanisms

Summer Research Assistant

- Developed stimuli presentation programs using FaceGen and photoshop for fMRI task
- Conducted literatures reviews regrading multi-voxel pattern analysis of fMRI tasks

2016 – 2018 Lab of Clinical and Translational Studies

Department of Psychiatry, Taipei City Hospital and Psychiatric Center

Principal Investigators: Po-Yu Chen, M.D., Ming-Chyi Huang, M.D., Ph.D.

Clinical Research Coordinator

- Coordinated four national grants of major depressive disorder, schizophrenia, and substance use disorder studies
- Screened, recruited, and ran 200+ sessions with participants at inpatient and outpatient settings
- Conducted clinical interviews (SCI-PANSS, C-SSRS, HAM-A, MADRS) and cognitive tests with inpatient and outpatient participants for clinical research studies
- Maintained the lab's recruitment database by regularly updating participants' eligibility, interest, and participation status for ongoing studies
- Prepared and updated IRB project materials including writing annual reports

CLINICAL EXPERIENCES

2017 – 2018 Taiwan LGBT Hotline Association

Supervisor: Chia-Wei Shiu, MSW

Crisis Counselor

- Answered to 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

TEACHING EXPERIENCES

2021 R Workshop

Designed materials and developed a workshop to teach R programming for beginners. The workshop included four sessions, including introduction to R, data wrangling, tidying data, data visualization, and data analysis. Please find my slides and R scripts on my GitHub.

2017-2018 **GRE Quantitative Tutor**

Helped college student to improve their score percentile from 30% to 80% for the GRE quantitative test. [My GRE Quantitative percentile: 95% (169/170)].

AWARDS & HONORS

2022	Data Science Fellowship, Correlation One
2021	Queer in STEM Scholarship (\$1250), oSTEM & Queer in AI
2021	Poster Finalist (Top 10), IASR/AFSP International Summit on Suicide Research
2020	Awarded A+ in Computational Psychiatry, Teachers College (TC), Columbia University
	 Only given in rare circumstances per school policy; awarded for exceptional research project
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

SKILLS

Statistical/Programming: R (Tidyverse, RMarkdown, Rshiny, Plotly), Python, SQL, SPSS, HTML, Bash, GitHub **Advanced Quantitative Modeling:** Supervised/unsupervised machine learning, gaussian mixed modeling, survival analysis, cluster analysis, time-series modeling, hierarchical linear modeling, confirmatory factor analysis

Research Data Management: REDCap, Qualtrics, Dedoose, Sysrey, Zotero, OSF

Neuroimaging Skills: FreeSurfer, FaceGen

Coursework: Probability and Inferential Statistics; Applied Regression Analysis; Data Science I; Computational

Psychiatry; Research Methods in Clinical Psychology; Child Psychopathology; Adult Psychopathology

Languages: English, Mandarin

PROFESSIONAL AFFILIATIONS

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