THOMAS CHAN, Ph.D.

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RESEARCH

I develop and evaluate the technologies that promote engaging healthier lifestyles and positive developmental trajectories. My focus is on leveraging immersive realities (e.g., augmented reality) and community assets (e.g., intergenerational mentoring) to create scalable win-win interventions that boost health equity and combat health disparities for underserved aging adults and their families.

Keywords: Augmented Reality, Mixed Reality, UX, UI, mHealth, Health Disparities, Cognitive Aging, Alzheimer's Disease, Developmental Neuroscience, Community-based Interventions, Resilience, Mentoring, Positive Psychology

EDUCATION

Postdoctoral Fellowship 2016 – 2018	Epidemiology, Biostatistics, & Mental Health of Aging Bloomberg School of Public Health & School of Medicine Johns Hopkins University, MD
Ph.D. 2016	Positive Developmental Psychology School of Social Science, Policy & Evaluation Claremont Graduate University, CA
Predoctoral Scholar 2008 – 2010	Developmental Psychobiology The Sackler Institute for Developmental Psychobiology Columbia University, NY
M.A. 2008	Psychology The City College of New York, NY
B.S. 2005	Psychology State University of New York at Oneonta, NY
POSITIONS	
2018 – present	Assistant Professor (tenure-track) Department of Psychology, Health Equity Research and Education Center California State University Northridge, CA
2016 - 2018	Postdoctoral Fellow Department of Mental Health, Center on Health and Aging Johns Hopkins University, MD
2013 - 2015	Lecturer Department of Psychology Whittier College, CA
2008 - 2009	Lecturer Department of Psychology The City College of New York, NY

GRANTS, HONORS, & RECOGNITION

2018	BUILD PODER Faculty Scholar Academy. California State University Northridge
2018	[\$2500] Center for Innovative Care in Aging Pilot Grant. Johns Hopkins University [\$2500]
2016-18	NIH/NIA Epidemiology and Biostatistics of Aging Postdoctoral Fellowship
	(Grant# NIA-T32AG000247). Johns Hopkins University [\$100,000+]
2017	BrainFutures Full Conference Scholarship. BrainFutures [\$600]
2014	The Over and Above Community Contribution Award. The City of Claremont
2014	Jenness Hannigan Research Stipend. Claremont Graduate University [\$200]
2013	Claremont Needs Assessment Stipend. The City of Claremont [\$500]
2013,15-16	Graduate Council Conference Awards. Claremont Graduate University
2012	Departmental Research Award. Claremont Graduate University [\$3000]
2012	World Congress Award. International Positive Psychology Association [\$350]
2012-16	Dean's Travel Awards. Claremont Graduate University
2011	Dean's Merit Fellowship. Claremont Graduate University [\$1000]
2011	Departmental Research Award. Claremont Graduate University [\$750]
2010-13	Claremont Merit-Based Fellowships. Claremont Graduate University [\$60,000+]
2010	Developmental Psychobiology Conference Award. Columbia University [\$500]

RESEARCH SUPPORT

2018 – present	NIH BUILD PODER Core Faculty Building Infrastructure Leading to Diversity; Promoting Opportunities for Diversity in Education and Research California State University Northridge, Health Equity Research and Education Center PIs: Carrie Saetermoe, Gabriela Chavira, Crist Khachikian, & Margaret Shiffrar Total Costs: \$5,148,514
2018 – present	Principal Investigator The Mobile Mindfulness Attention Study: Piloting the Feasibility of a Wearable EEG Device and Attention Quantifying Software in Older Adults Johns Hopkins University, Center for Innovative Care in Aging PI: Thomas Chan, Total Costs: \$2,500
2016 – present	Co-Investigator The SWIM Project: Piloting the Bandit Dolphin Kinect Application to Promote Cognitive and Functional Health in Community-Dwelling Adults Johns Hopkins University, Schools of Public Health & Medicine PI: Michelle C. Carlson, Total Costs: \$25,000
2016 - 2017	Social and Behavioral Scientist User Experience and Technology Design to Promote Community Dining Behaviors Spotluck, Inc.
2014 - 2016	Research Associate and Project Manager Developmental Pathways to Entrepreneurship and Problem Solving in Later Life Claremont Graduate University, Quality of Life Research Center PIs: Jeanne E. Nakamura & Mihaly Csikszentmihalyi, Total Costs: \$100,000
2013 - 2014	Principal Investigator Do Current City Programs and Policies Meet the Needs of Claremont's Seniors? The City of Claremont, Human and Community Services PI: Thomas Chan, Total Costs: \$500

2010 - 2016	Research Associate Sources of Good Mentoring at Work & The Cross Cultural Study of Happiness and Meaningful Life Activities Claremont Graduate University, Quality of Life Research Center PIs: Jeanne E. Nakamura & Mihaly Csikszentmihalyi, Total Costs: \$409,975
2008 - 2010	Research Assistant and Project Manager The Development of the Prefrontal Cortex in Response to Ecological Stressors and Threats Columbia University, Division of Developmental Neuroscience PIs: Christoph P. Wiedenmayer & Harry Shair, Total Costs: \$1,220,137

PUBLICATIONS

*formerly published as Miranda-Chan, T.

- Moored, K.D., **Chan, T.**, Varma, V.R., Chuang, Y., Parisi, J.M., & Carlson, M.C. (in press). Engagement in Enriching Early Life Activities is Associated with Larger Hippocampal and Amygdala Volumes in Community-Dwelling Older Adults. *Journals of Gerontology: Psychological Sciences*.
- Chan, T., Parisi, J.M., Moored, K.D., & Carlson, M.C. (2018). Variety of enriching early life activities linked to late life cognitive functioning in urban community-dwelling African Americans. *Journals of Gerontology: Psychological Sciences*.
- Nakamura, J., & **Chan, T.** (in press). Positive aging from a lifespan perspective. In *Handbook of Positive Psychology (3rd edition)*.
- Fruiht, V., & Chan, T. (2018). Naturally occurring mentorship in a national sample of first-generation college goers: a potential portal for academic and developmental success. *American Journal of Community Psychology*.
- Chan, T., & Carlson, M. C. (2016). Building upon the CALLA framework: The intersection of novel problem solving and applied wisdom. [Peer commentary on "A novel theoretical life course framework of triggering cognitive development across the lifespan]," by R. Wu, G.W. Rebok, & F.V. Lin. *Human Development*, 59(6), 366-371.
- Nakamura, J., Miranda-Chan, T., Graham, L., Procter, K., & Csikszentmihalyi, M. (2016). Paths to social purpose after 60. Encore.org.
- Miranda-Chan, T., Fruiht, V., Dubon, V., & Wray-Lake, L. (2016). The longitudinal outcomes and roles naturally occurring community mentors have on a nationally represented sample of youth. *American Journal of Community Psychology*, *57*, 47-59.
- Miranda-Chan, T., & Nakamura, J. (2015). A generativity track to life meaning in retirement: Ego-integrity returns on past academic mentoring investments. *Work, Aging and Retirement, 2*(1), 24-37.
- Chan, T., Lucas, H., Liu, M., Likens, S., & Lass, J. (2014). Community needs assessment of Claremont's older adults. The City of Claremont, Community and Human Services.
- Mangan, S., Toledo, J., Anastasiadou, A., Chan, T., & Berry, T. (2014). Youth Activity Center: Evaluation report. The City of Claremont, Community and Human Services.
- Nakamura, J., Warren, M., Branand, B., Liu, M., Wheeler, B., Chan, T. (2014). Positive psychology across the lifespan. In *Perspectives on the Intersection of Multiculturalism and Positive Psychology* (pp. 109-124). Springer Netherlands.

- Kabitzke, P., Barr, G., **Chan, T.**, Shair, H., & Wiedenmayer, C.P. (2014). Medial prefrontal cortex processes threatening stimuli in juvenile rats. *Neuropsychopharmacology*, *39*(8), 1924-1932.
- Chan, T., Nakamura, J., & Csikszentmihalyi, M. (2013). *Study of early career physicians: Mentoring in the field of medicine*. Quality of Life Research Center, CA.
- Chan, T., Kyere, K., Davis, B.R., Shemyakin, A., Kabitzke, P., Shair, H., Barr, G.A., & Wiedenmayer, C.P. (2011). The role of the medial prefrontal cortex in innate fear regulation in infants, juveniles, and adolescents. *Journal of Neuroscience*, 31(13), 4991-4999.

Manuscripts Under Review

Fruiht, V. & Chan, T. (submitted). Flourishing and risk factors as antecedents to natural mentoring: A dimming tale of rising stars.

PRESENTATIONS

Oral Conference Presentations

- **Chan, T.** (2019, February). *Making aging magical: Using augmented reality for promoting health interventions and engaging medical assessments.* Symposium presented at Medical Design & Manufacturing West Conference, Anaheim, CA.
- Carlson, M.C., Chan, T., Adam, A., Ahmad, O., Roy, P., Rosano, C., Rosso, A., Krakauer, J. (2018, November). *Piloting a virtual reality application to promote executive function and community mobility in aging adults*. Symposium presented at Gerontological Society of Aging Annual Scientific Meeting, Boston, MA.
- **Chan, T.** (2018, November). *Innovation in healthcare: Leveraging technological assets to combat health disparities.* Symposium presented at The Fifth Art of Innovations Conference, Northridge, CA.
- Chan, T. (2018, October). *Leveraging community partnerships to promote positive aging and development*. Symposium presented at Integrative Behavioral Health Research Institute, Los Angeles, CA.
- **Chan, T.** (2017, July). Beyond health and wealth: The psychosocial resources and retirement conditions that predict people's long-term happiness trajectories through the retirement transition. Symposium presented at Fifth World Congress on Positive Psychology, Montreal, QC.
- Nakamura, J., Graham, L., Chan, T., & Procter, K. (2017, July). Facilitating purpose in later life: Pathways to social purpose and innovation after sixty. Symposium presented at The International Association of Gerontology & Geriatrics World Congress, San Francisco, CA.
- Fruiht, V. & Miranda-Chan, T. (2017, April). Naturally occurring mentors of first-generation college students. Symposium presented at Society for Research in Child Development, Biennial Meeting, Austin, TX.
- Miranda-Chan, T., Fruiht, V., Dubon, V., & Wray-Lake, L. (2016, March). *The functions of longitudinal outcomes of adolescents' naturally occurring mentorships: A mixed method approach*. Symposium presented at Society for Research on Adolescence, Biennial Meeting, Baltimore, MD.
- Chan, T. (2015, June). *The contributions of vital engagement to good work*. Symposium presented at the Fourth World Congress on Positive Psychology, Lake Buena Vista, FL.
- Chan, T. (2013, June). *Generativity and ego-integrity returns on past mentoring investments*. Symposium presented at the Third World Congress on Positive Psychology, Los Angeles, CA.

- Liu, M. & Chan, T. (2013, June). *Inclusion of positive empathy as a distinct construct in empathy research*. Symposium presented at the Third World Congress on Positive Psychology, Los Angeles, CA.
- **Chan, T.** (2012, April). Longitudinal investigation of the role of birth order on early maternal expectations and involvement, child leadership potential, and adult leadership attainment. Symposium presented at the annual meeting of the Western Psychological Association, San Francisco, CA.

Poster Conference Presentations *denotes student author

- **Chan, T.,** Moored, K.D., Parisi, J.M., & Carlson, M.C. (2018, May). *Enriching early life activities to build cognitive reserves and combat health disparities*. Poster presented at The Cognitive Aging Conference, Atlanta, GA.
- Moored, K.D., **Chan, T.,** Varma, V.R., Chuang, Y., Parisi, J.M., & Carlson, M.C. (2018, May). Early life enrichment predicts hippocampal and amygdala volumes in older adulthood. Poster presented at The Cognitive Aging Conference, Atlanta, GA.
- Boeder, J.*, Chan, T., Miranda, B., Knock, J., & Niles, M. (2016, January). *Being haunted by past romantic decisions: A phenomenological investigation of salient romantic regret in adulthood.* Poster presented at the annual meeting of the Society for Personality and Social Psychology, San Diego, CA.
- Chan, T., Nakamura, J., & Csikszentmihalyi, M. (2013, August). *A glimpse of the enduring implications of mentoring students*. Poster presented at the annual meeting of the American Psychological Association, Honolulu, HI.
- Kabitzke, P.A., Kativhu, C., **Chan, T.**, Barr, G.A., Shair, H.N., & Wiedenmayer, C.P. (2011, November). *Processing of threatening stimuli by the medial prefrontal cortex begins in juvenile rats.* Poster presented at the annual meeting of the Society of Neuroscience, Washington, DC.
- Ko, I., Dias, S., Koch, J., Fruiht, J., Branand, B., Chan, T., & Nakamura, J. (2011, April). *The relationship between work-home interference and job/life satisfaction: Mediating effects of meaning and flow.* Poster presented at the annual meeting of the Western Psychological Association, Los Angeles, CA.
- Chan, T., Kyere, K., Oliver, C.F., Madrid, J.*, Schubmehl, C.*, Chemiakine, A., Shair, H., & Wiedenmayer, C.P. (2010, November). *The connection between the medial prefrontal cortex, amygdala and periaqueductal gray in innate fear processing during ontogeny.* Poster presented at the annual meeting of the International Society for Developmental Psychobiology, San Diego, CA.
- Chan, T., Kyere, K., Madrid, J.*, Schubmehl, C.*, Chemiakine, A., Kabitzke, P., & Wiedenmayer, C.P. (2010, November). *The role of the medial prefrontal cortex in emotion regulation of infants, juveniles, and adolescents*. Poster presented at the annual meeting of the Society for Neuroscience, San Diego, CA.
- Kyere, K., Chan, T., Shemyakin, A., & Wiedenmayer, C.P. (2009, November). *The medial prefrontal cortex in fear behavior in young rats.* Poster presented at the annual meeting of the Society for Neuroscience, Chicago, IL.

Invited Talks

- Pathways to Careers in User Experience (UX) & Interface (UI) Research and Design. Invited panelist by BUILD Promoting Opportunities for Diversity in Education & Research (PODER). California State University Northridge, CA. October 30, 2018.
- Evaluation Findings and Community Improvement Recommendations: A Claremont Senior Programs Community Needs Assessment. Invited presenter by Kiwanas Association, CA. May 22, 2014.

- Evaluation Findings and Policy Recommendations: A Claremont Senior Programs Community Needs Assessment. Invited presenter by The City of Claremont City Council, CA. May 6, 2014.
- Program Recommendations for Claremont Senior Programs. Invited presenter and panelist by The City of Claremont Committee on Aging, CA. March 12, 2014.
- A Claremont Senior Programs Community Needs Assessment. Invited presenter and panelist by The City of Claremont Committee on Aging, CA. March 13, 2013.

TEACHING

2013 - 2015	Lecturer Courses: Psychology of Aging, Social Psychology & Positive Psychology Whittier College, CA
2013	Teaching Associate Course: Structural Equation Modeling Claremont Graduate University, CA
2008 - 2009	Lecturer Courses: Personality Psychology & Social Psychology The City College of New York, NY
2006 - 2008	Graduate Teaching Assistant and Course Instructor Course: Introduction to Psychology The City College of New York, NY

PROFESSIONAL ACTIVITIES

Ad Hoc Reviewer

The Journals of Gerontology – Series B: Psychological & Social Sciences Research on Aging (Sage) Work, Aging and Retirement (Oxford) International Positive Psychology Association World Congress

Professional Affiliations

Gerontological Society of America American Psychological Association Society for Neuroscience International Society for Developmental Psychobiology International Positive Psychology Association