Yun-Ju (Claire) Chen

Department of Psychiatry and Behavioural Neurosciences, McMaster University

Email: chenyunj@usc.edu Personal Website: www.yunjchen.com

Employment

2021-Current **Postdoctoral Research Fellow**, Offord Centre for Child Studies, McMaster University, Canada (Advisor: Dr. Stelios Georgiades)

Education

- 2021 **Ph.D. in Occupational Science,** University of Southern California, USA Dissertation: Developmental trajectories of sensory patterns in young children with and without Autism: A longitudinal population-based study from infancy to school age (Advisor: Dr. Grace T. Baranek)
- 2012 **M.S. in Medical Sciences**, Keio University, Japan Thesis: Impact of stimuli with audiovisual synchrony on attention triggering effects in individuals with autism spectrum disorders (Advisor: Dr. Motoichiro Kato)
- 2009 **B.S. in Occupational Therapy**, National Taiwan University, Taiwan (2008-2009 NTU Exchange Student Program at Waseda University, Japan)

Awards & Honors -

- 2023 Society for Research in Child Development (SRCD) Early Career Interdisciplinary Scholars Fellow
- 2021 Elizabeth June Yerxa Award for Excellence in Research Distinction (University of Southern California)
- 2020 Dr. Zemke Scholarship in Occupational Science (\$5,000 USD)
- 2020 International Society for Autism Research (INSAR) Student Travel Award (\$500 USD)
- 2016-2018 Fulbright Graduate Study Grant (\$45,000 USD/yr)
 - 2011 Social Neuroscience Conference Travel Award (National Institute for Physiological Sciences, Japan)
- 2011-2012 Keio University Graduate Student Scholarship (Japan; \$580 USD)
- 2010-2012 Moritani Foundation Scholarship (Japan; \$11,610 USD/yr)
- 2010-2011 Hakumon Foundation Scholarship (Japan; \$2,320 USD)
- 2008-2009 Ministry of Education Scholarship for Exchange Students (Taiwan; \$5,325 USD)

Grants -

Funded

- 2022-2025 Transforming Autism Care Consortium (TACC) Early-Career Fellowship (\$54,000 CAD/40,562 USD), PI: A transdiagnostic investigation of co-occurring health conditions in autism among the Canadian Health Survey of Children and Youth cohort: Age-varying patterns and functional impact (Advisors: Eric Duku, Katholiki Georgiades, Stelios Georgiades, & Meng-Chuan Lai)
- 2022-2027 Canadian Institutes for Health Research (CIHR) Project Grant (\$1,147,500 CAD/861,945 USD), Co-I (PI: Georgiades S, Singal D, & Zwaigenbaum L): Pediatric Autism Research Cohort (PARC): A patient-oriented prospective study examining trajectories of functioning in Canadian children with autism
- 2019-2020 Organization for Autism Research (OAR) Graduate Research Grant (\$2,000 USD), PI: Developmental trajectories of sensory features and later functional outcomes in ASD: A longitudinal subtyping study from infancy to school age (Advisor: Grace T. Baranek)

Submitted

Exp. 2023-25 CIHR Fellowship Grant, PI: Developmental dynamics of autism symptomatology and functional impact across early childhood: Identifying intervention targets and time window for improved outcomes (Advisor: Stelios Georgiades)

Research Experience ——

2022-present Impact of COVID-19 on the mental health and well-being of children and family in Ontario (ON:PATH)

- PI: Dr. Katholiki Georgiades, Advancing Youth Mental Health (AYM) Research Team, McMaster University
- Provincial population-based longitudinal study tracking meatal health of children/youth and their families during COVID-19 – longitudinal & epidemiological data analyses

2021-present

Developmental trajectories of stakeholder-informed outcomes in autism (Pediatric Autism Research Cohort, PARC)

- PI: Dr. Stelios Georgiades, McMaster Autism Research Team (MacART), Canada
- Large-scale cross-site inception cohort of autistic children longitudinal behavioral data analyses for improving practice and informing policy development

2017-2021 Early detection and intervention for autism among culturally diverse populations in Los Angeles

- PI: Dr. Grace Baranek, Innovations in Neurodevelopmental Sensory Processing Research (insp!re) Lab, University of Southern California
- Population-based longitudinal data collection/management, measurement validation and cross-cultural adaptations, clinical assessment (sensory)

Early level-1 screening of autism: First Years Inventory (North Carolina Child 2016-2021 **Development Survey, NCCDS**)

- PI: Drs. Grace Baranek, Linda Watson, & Elizabeth Crais, Early Autism Research, Leadership & Service (PEARLS), UNC-Chapel Hill
- Population-based longitudinal data collection/management, data analysis & measurement development/psychometrics

2012–2013 Neurophysiological markers of social affect for autism at infancy

- PI: Dr. Yawei Cheng, Social Neuroscience Lab, National Yang-Ming University,
- EEG/ERP data collection (Neuroscan) & analysis (Matlab), clinical assessment (ADI-R) for infants at elevated likelihood for autism

2010-2012 Audiovisual face/gaze processing in adults with autism

- PI: Dr. Motoichiro Kato, School of Medicine, Keio University, Japan
- Experimental paradigm design/setup & data collection/analysis

Clinical Experience -

Licensed Occupational Therapist (Taiwan)

2013-2014	Pediatric occupational therapist, Kang-Jian Rehabilitation Clinic, Taiwan
2013-2014	School-based occupational therapist, Special Education School System of
	New Taipei City, Taiwan
2007-2008	Occupational therapist internship (pediatrics, psychiatry, & physical rehabilitation)

Selected Additional Training —

- 2020-2022 Advanced quantitative methods (structural equation modeling, longitudinal data analysis), Curran-Bauer Analytics, NC
- 2018-2019 Sensory Processing Assessment (SPA) approved assessor (Trainer: Dr. Grace T. Baranek)

2018 Fall	Biosemi EEG/body movement data collection, USC, CA (Trainer: Dr. Beth Smith)
2018/11	EEGLAB Workshop, Swartz Center for Computational Neuroscience, UCSD, CA
2013 Spring	Applied Behavioral Analysis (ABA) training program, Taiwan Association for
	Behavioral Analysis, Taiwan
2012/04	ADI-R training, Japan (Trainer: Dr. Catherine Lord)
2011-2012	RIKEN Brain Science Institute graduate student training program, Japan

Teaching Experience -

2014-2015 Visiting Lecturer, Bennett College (historically black liberal arts college), NC

Publications —

Peer-Reviewed Journal Articles

- 1. **Chen YJ**, Duku E, Zaidman-Zait A, Szatmari P, Smith IM, Ungar WJ, ..., & Georgiades S (in press). Variable patterns of daily activity participation across settings in autistic youth: A latent profile transition analysis. *Autism.* doi: 10.1177/13623613231154729
- 2. **Chen YJ**, Sideris J, Watson LR, Crais ER, & Baranek GT (2023). Early developmental profiles of sensory features and links to school-age adaptive and maladaptive outcomes: A birth cohort investigation. *Development and Psychopathology*, 1-11. doi: 10.1017/S0954579422001195
 - Media coverage at *Chan Division News*, *MedicalXpress*
- 3. **Chen YJ**, Duku E, & Georgiades S (2022). Rethinking autism intervention science: A dynamic perspective. *Frontiers in Psychiatry*, *13*, 827406. doi: 10.3389/fpsyt.2022.827406
- 4. **Chen YJ**, Sideris J, Watson LR, Crais ER, & Baranek GT (2022). Developmental trajectories of sensory patterns from infancy to school age in a community sample and associations with autistic traits. *Child Development*, *93*(4), e446-e459. doi: 10.1111/cdev.13745
 - Media coverage at Daily Trojan, MedicalXpress, The Sector
- 5. **Chen YJ**, Harrop C, Sabatos-DeVito M, Bulluck J, Belger A, & Baranek GT (2022). Brief report: Attention patterns to non-social stimuli and associations with sensory features in autistic children. *Research in Autism Spectrum Disorders*, *98*, 102035. doi: 10.1016/j.rasd.2022.102035
- 6. Lee H, Chen YJ, Sideris J, Watson LR, Crais ER, & Baranek GT (2022). Sensory features of young children from a large community sample: Latent factor structures of Sensory Experiences Questionnaire (Version 2.1, Short Form). *American Journal of Occupational Therapy*, 76(3), 7603205140. doi: 10.5014/ajot.2022.046995
- 7. Baranek GT, Sideris J, Chen YJ, Crais ER, Turner-Brown L, & Watson LR (2022). Early measurement of autism risk constructs in the general population: A new factor structure of the First Years Inventory (FYIv3.1) for ages 6-16 months. *Autism Research*, 15(5), 915-928. doi: 10.1002/aur.2691
- 8. Campi E, Choi E, Chen YJ, Holland C, Bristol S, Sideris J, Crais ER, Watson LR, & Baranek GT (2022). Sensory reactivity of infants at elevated likelihood of autism and associations with caregiver responsiveness. *Journal of Autism and Developmental Disorders*, 1-10. doi: 10.1007/s10803-022-05764-z
- 9. Huang WC*, **Chen YJ***, Chien CL, Kashima H, & Lin KC (2011). Constraint-induced movement therapy as a paradigm of translational research in neurorehabilitation: Reviews and prospects. *American Journal of Translational Research*, *3*(1): 46-58 (*: equal contribution).
- 10. Konishi M, Chen YJ, & Kato M (2011). The assessment and rehabilitation of attention impairments. *Japanese Journal of Geriatric Psychiatry*, 22(3): 295-301.

Manuscripts Under Revision/Review

1. **Chen YJ**, Sideris J, Watson LR, Crais ER, & Baranek GT (under review). Measurement invariance of the First Years Inventory (FYIv3.1) across age and sex for early detection of autism in a community sample of infants.

2. Gentles S, Ng-Cordell E, Hunsche M, McVey A, Bednar D, Chen YJ, ..., & Georgiades S (under revision). Trajectory research in children with an autism diagnosis: A scoping review.

Manuscripts In Preparation

- 1. **Chen YJ**, Duku E, Szatmari P, Smith IM, Zwaigenbaum L, ..., & Georgiades S (in prep). Trajectories of adaptive functioning from early childhood to adolescence in autism: Identifying key correlates and turning points.
- 2. **Chen YJ**, Sideris J, Watson LR, Crais ER, & Baranek GT (in prep). The developmental impacts of sensory features on school-age functional outcomes in autistic and non-autistic children.
- 3. **Chen YJ**, Duku E, Vaillancourt T, ..., Georgiades S (in prep). Age-varying associations between parent-reported autism symptomatology and psychopathological traits.

Conference Presentations -

Panel/Oral Presentations

- 1. **Chen YJ**, Sideris J, Watson LR, Crais ER, & Baranek GT (accepted). The developmental impacts of sensory features on school-age functional outcomes in autistic and non-autistic children. Panel on "Individual Variability in Sensory Processing and Developmental Links to Autism: Interdisciplinary Findings from Infancy to Adulthood" at: *INSAR Annual Meeting; Stockholm, Sweden*.
- 2. **Chen YJ**, Sideris J, Watson LR, Crais ER, & Baranek GT (2022). Do toddlers' age and sex impact parental reports of early signs of autism spectrum disorder? A moderated nonlinear factor analysis. *International Congress of Infant Studies; Ottawa, ON*.
- 3. **Chen YJ**, Sideris J, Watson LR, Crais ER, & Baranek GT (2022). Early developmental profiles of sensory patterns in a community sample: Associations with later autistic traits and adaptive functioning. *INSAR Annual Meeting; Austin, TX*.
- 4. **Chen YJ**, Sideris J, Watson LR, Crais ER, & Baranek GT (2021). Developmental trajectories of sensory patterns from infancy to school age in children with ASD and non-ASD conditions. *INSAR Annual Meeting (Virtual)*.
- 5. **Chen YJ**, Sideris J, Watson LR, Crais ER, & Baranek GT (2020). Early screening for autism: Analytic approaches to assessing psychometric validity and phenotypic variability. Panel on "Challenges and Innovations in Screening Infants for Markers of Autism Spectrum Disorder" with Drs. Watson LR & Talbott M at: *Conference on Research Innovations in Early Intervention; San Diego, CA*.
- 6. **Chen YJ**, Konishi M, Saito F, Akiyama T, & Kato M (2011). The impact of stimuli with audiovisual synchrony on attention triggering effects. *Social Neuroscience Conference at National Institute for Physiological Science; Okazaki, Japan.*

Poster Presentations (Selected)

- 1. **Chen YJ**, Duku E, Szatmari P, Smith IM, Zwaigenbaum L, ..., & Georgiades S (accepted). Correlates and turning points of adaptive functioning trajectories and longitudinal associations with autism symptoms from early childhood to adolescence. *INSAR Annual Meeting; Stockholm, Sweden*.
- 2. **Chen YJ**, Duku E, Zaidman-Zait A, Szatmari P, Smith IM, Ungar WJ, ..., & Georgiades S (accepted). Daily activity participation across settings in autistic youth: Individual variability and temporal stability. *INSAR Annual Meeting*; *Stockholm, Sweden*.
- 3. **Chen YJ**, Sideris J, Watson LR, Crais ER, & Baranek GT (2020). A latent profile analysis of infants' sensory, motor, and social communication risk on the First Years Inventory and age-3 outcomes in a community sample. *INSAR Annual Meeting (Virtual)*.
- 4. **Chen YJ**, Sideris J, Watson LR, Crais ER, & Baranek GT (2020). Prevalence and differentiating patterns of sensory symptoms among 3-year-olds with and without ASD. *Annual Gatlinburg Conference; San Diego, CA (Canceled)*.

- 5. **Chen YJ**, Sideris J, Watson LR, Crais ER, & Baranek GT (2019). First Years Inventory: Examining measurement invariance across age, sex, and prematurity status. *INSAR Annual Meeting; Montreal, QC*.
- 6. **Chen YJ**, Sideris J, & Baranek GT (2019). Potential use of First Years Inventory to differentiate autism spectrum disorder from other developmental delays within the first two years of life. *American Occupational Therapy Association (AOTA) Annual Conference; New Orleans, LA*.
- 7. **Chen YJ**, Harrop C, Sabatos-DeVito M, Bulluck J, & Baranek GT (2018). Patterns of attention to non-social stimuli in children with autism spectrum disorder. *INSAR Annual Meeting; Rotterdam, Netherlands*.
- 8. **Chen YJ**, Sideris J, Watson LR, & Baranek GT (2018). Sensory-regulatory functioning as an important aspect of early identification of autism spectrum disorder. *Conference on Research Innovations in Early Intervention; San Diego, CA*.
- Chen YJ, Sideris J, Watson LR, Crais ER, Turner-Brown L, & Baranek GT (2018). Validation of FYI-Lite as a short screening tool for infants at risk for autism. AOTA Annual Conference; Salt Lake City, UT.
- 10. Chen YJ, Davis VL, Watson LR, Crais ER, Turner-Brown L, Bulluck J, Zhang W, Faldowski R, & Baranek GT (2017). Examination of developmental sensitivity of items on the revised First Years Inventory screener for infants at risk for a later diagnosis of autism spectrum disorder. INSAR Annual Meeting; San Francisco, CA.
- 11. **Chen YJ**, Lee SY, & Cheng Y (2013). Emotional mismatch negativity as a potential neurophysiological biomarker for autism spectrum disorder. *Organization for Human Brain Mapping; Seattle, WA*.

Invited Talks —

- 1. **Chen YJ** (Dec 2022). Tracking early sensory differences in autism: Developmental variability and cascades. *McMaster Developmental Pediatrics Academic Hour, Hamilton, ON*.
- 2. **Chen YJ** (Oct 2022). Sensory patterns and autistic traits: What are the implications? (conversations with Dr. Sarah Schoen). 2022 STAR Institute Sensory Symposium, Denver, CO.
- 3. **Chen YJ** & Baranek GT (Jul 2022). Sensory features in autism (broadcast interview with Dr. Michael Romas). *DDI on Autism, Long Island News Radio, NY.*
- 4. **Chen YJ** (Apr 2022). Autism across the lifespan: Conceptual issues and analytic strategies. *Offord Centre for Child Studies Lunch and Learn, Hamilton, ON*.
- 5. **Chen YJ**. Prevalence and differentiating patterns of sensory features among 3-year-olds and 6-year-olds with and without ASD (Mar 2021). *USC OT564: Sensory Integration, Los Angeles, CA*.

Student Supervision

Graduate research supervision:

- Amanda Assi (Neuroscience, McMaster University; 2022-present)
- Areeba Sharafuddin (Neuroscience, McMaster University; 2022-present)

Undergraduate research supervision:

Elysa Eliopulos (Psychology, McMaster University; 2022-present)

Professional Service -

Ad hoc reviewer of the following journals:

- American Journal on Intellectual and Developmental Disabilities
- Autism
- Autism Research (recognized as top 20% of the reviewers in 2022)
- BMC Psychiatry
- Developmental Medicine & Child Neurology
- Journal of Autism and Developmental Disorders

- Journal of Neurodevelopmental Disorders
- Molecular Autism

Abstract reviewer of the following conference(s):

Society for Research in Child Development Biennial Meeting

Professional Affiliations -

International Society for Autism Research (2017-present) Society for the Study of Occupation (2020-present) International Congress of Infant Studies (2021-present) Society for Research in Child Development (2022-present)

American Psychological Association (2022-present)

Skills -

Languages Mandarin Chinese (native), English (fluent), Japanese (fluent),

Spanish (conversational)

Programming R, Python, MATLAB

Statistical Software R, Mplus, Stata, SAS, SPSS

Analytic Techniques Regression, mediation, moderation, structural equation modeling, multi-level

modeling, latent curve modeling, mixture modeling, psychometrics (factor

analyses, item response theory)

References -

Stelios Georgiades, PhD (Postdoc advisor)

Associate Professor, Department of Psychiatry and Behavioural Neurosciences, & Director, Offord Centre for Child Studies, McMaster University, ON, Canada

Email: georgis@mcmaster.ca

Grace T. Baranek, PhD, OTR/L, FAOTA (PhD advisor, dissertation committee chair)

Associate Dean, Chair and Professor, Chan Division of Occupational Science and Occupational Therapy, University of Southern California, CA, USA

Email: chair@chan.usc.edu

Eric Duku, PhD (Postdoc co-advisor)

Associate Professor, Department of Psychiatry and Behavioural Neurosciences, McMaster University, ON, Canada

Email: duku@mcmaster.ca

Linda R. Watson, EdD (PhD co-advisor, dissertation committee member)

Professor, Department of Health Sciences, University of North Carolina at Chapel Hill, NC, USA Email: linda watson@med.unc.edu