
Patrick Dwyer

psdwyer@ucdavis.edu

Personal Blog: autisticscholar.com

Education

- 2019 – present..... Student in Ph.D. Program in Developmental Psychology
University of California, Davis
- 2017 – 2019 M.A. in Psychology
University of California, Davis
- 2012 – 2017 B.A. (Honours) in Psychology, minoring in Political Science
With Distinction
University of Victoria
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Honours and Awards

- May 2019, 2020 Autistic Researcher Travel Award, International Society for Autism
Research..... USD \$2,000
- November 2018..... Travel Award, International Society for Developmental Psychobiology
..... USD \$385
- August 2017..... Canadian Psychological Association Certificate of Academic Excellence
- June 2017..... Dean's Honour List for Social Sciences, University of Victoria
- March 2017..... UC Davis Dean's Distinguished Graduate Fellowship USD \$54,000
- March 2017..... Vanderhoef International Graduate Student Fellowship
Alex & Phyllis McCalla International Graduate Student
Support Award..... USD \$3,400
- September 2016 Nominated by the University of Victoria as a candidate for
the Rhodes Scholarship in the province of British Columbia
- July 2016 Hector William Hadland Scholarship in Psychology..... CAN \$6016
- September 2015 Jamie Cassels Undergraduate Research Award (JCURA) CAN \$1500
- July 2014 Hector William Hadland Scholarship in Psychology..... CAN \$3888
- November 2012..... Governor General's Bronze Academic Medal (highest
graduating average, South Island Distance Education School)
- August 2012..... University of Victoria Renewable Excellence Scholarship
(renewed in 2013, 2014, and 2015)..... CAN \$26,000
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Research Experience

- 2019 – present..... **Multisensory integration in children with Autism Spectrum Disorder.**
- Investigated group differences in unisensory and multisensory processing using event-related potentials and behavioural responses to unimodal, bimodal, and trimodal (audio-visual-somatosensory) stimuli in autistic and typically-developing adolescents.

- Explored sensory processing in ASD and TD adolescents using questionnaire and, in the auditory and tactile modalities, behavioural/psychophysical measures.

2017 – present..... **Brain Research in Autism Investigating Neurophenotypes (BRAIN) ERP Studies.**

- Collected ERP data from autistic and neurotypical children (aged 2 – 3.5) and helped to set up the ERP laboratory for data collection. Processed ERP data using SOBI independent components analysis.
- Collected eye-tracking data in five tasks (respectively measuring attention switching, multisensory integration, language, attentional bias to threat, and novelty preference) and wrote scripts to process raw eye-tracking data files from each task.
- Supervised and mentored undergraduate research assistants conducting poster projects on data from the five eye-tracking tasks above.

2017 – present..... **Autism Phenome Project (APP) ERP Study.**

- Examined individual differences in large APP dataset of ERP responses to auditory stimuli of different loudness intensities. Utilized hierarchical clustering procedures to identify subgroups in time-wise ERP data using global field power as a metric.
- Used growth and factor mixture models to identify subgroups based on longitudinal questionnaire data collected in the APP and compared ERP waveforms of different subgroups.
- Conducted nonparametric analyses exploring relationships between time-wise ERP data and measured variables.
- Explored methods of quantifying ERP amplitudes and latencies while allowing for inter-individual variability in topography.
- Conducted cluster-based permutation analyses to explore trial-by-trial habituation and inter-trial variability.

2017 – 2018 **A trial of sertraline in young children with autism spectrum disorder (Sert2).**

- Tested autistic children (aged 2-5) with eye-tracking measures of receptive language, attention shifting, attention to emotional faces.
- Examined eye-tracking task performance as a clinical outcome.

2016 – 2017 **Investigating the perception of face identity in adults on the autism spectrum using behavioural and electrophysiological measures.**

Honours project supervised by Professor James Tanaka and Dr. Buyun Xu.

- Used the emerging fast periodic visual stimulation (FPVS) oddball paradigm to measure facial identity discrimination in autistic adults and general population controls.

2015 – 2016 **People with autism: lineup identification and facial recognition memory.** Jamie Cassels Undergraduate Research Award (JCURA) Project. Supervised by Professor D. Stephen Lindsay and Mario Baldassari.

- Developed and conducted a supervised research project examining lineup identifications by a vulnerable population, autistic adults.
- 2015 – 2016 **Psychology 492 Research Seminar.** Undergraduate seminar class in the Different Minds Lab, taught by Professor James Tanaka.
- Tested typically-developing participants in projects related to visual expertise and face and bird identification.
- 2013 – 2015 Paid **Research Assistant** (2014-2015) and paid **Work-Study Student** (2013-2014) in the Lindsay Lab.
- Developed materials for an online version of a recognition memory response bias experiment.
 - Collaborated with other students in conducting a study of subjective memory reports of lineup identification rejections.

Other Experience

- 2020 – present Member, **Autistic Researcher Review Board**, Autism Intervention Research Network on Physical Health (AIR-P)
- Currently working collaboratively to define roles and responsibilities for newly-established review board for AIR-P Network.
- 2020 – present Member, **Advisory Board**, Next Steps: Autism Campus Prep, Sinneave Foundation
- Currently working collaboratively with other advisors and Sinneave staff to develop an online curriculum for prospective autistic postsecondary students, to prepare them for the unfamiliar environment and expectations of college.
- 2020 – present Co-Chair, **Autistic Researchers Committee**, International Society for Autism Research (INSAR)
- Gathered a group of autistic researchers and proposed creation of a new INSAR committee, which was approved by the Board.
 - Collaboratively organized a virtual workshop to solicit community feedback regarding committee activities and projects and prepared report on findings with recommendations for INSAR.
 - Collaboratively developed (before COVID cancellation) measures to enhance accessibility of INSAR meetings, such as quiet poster viewing times, an autistic social space, and autism training for staff.
- 2018 – present Member, **Consumer Advisory Committee**, Center for Excellence in Developmental Disabilities (CEDD), UC Davis MIND Institute
- Participated in strategic planning for a major university centre that bridges across gaps between research and communities.
- 2018 – 2020 Frequent guest contributor to NSF-funded **Stairway to STEM** website.
- Developed information resources for autistic university students, their parents, and their educators.
- 2018 – present Founder and President, **Autism and Neurodiversity Community at UC Davis**

- Founded a peer-support group for autistic students at UC Davis.
 - Assisted individual students with advocacy problems.
 - Collaborated with other organizations to organize public events related to autism and neurodiversity on campus.
 - Helped UC Davis autistic students develop and deliver autism trainings to faculty and TAs on the UC Davis campus.
- 2015 – 2017 Director on the Board of **Community Living Victoria (CLV)**.
- Served on the board of Vancouver Island’s largest community living not-for-profit organization (with over 200 staff).
- 2013 – 2017 (*consecutively*) Member at Large, Treasurer, and Chairperson of the University of Victoria **Society for Students with a Disability (SSD)**.
- Represented and advocated for students with disabilities as a board member of an official advocacy group affiliated with the University of Victoria Students’ Society (UVSS).
 - Budgeted the SSD’s resources, including its allotment of UVic student fees; supervised the SSD’s staff, including both Coordinator and work-study positions, and organized and promoted a variety of SSD events.
- 2013 – 2017 Facilitator and Vice-President of **Authors with Autism**; peer-support group and University of Victoria club.
- Organized and directed meetings of a peer-support group of individuals diagnosed or self-identifying with autism.
 - Organized the Autism’s Own Conference in 2015 and 2016. Obtained sponsorships, promoted the events, arranged catering, and recruited presenters, performers, and volunteers.

Publications

- Gillespie-Lynch, K., **Dwyer, P.**, Constantino, C., Kapp, S. K., Hotez, E., Riccio, A., DeNigris, D., Kofner, B., & Endlich, E. (In press.) Can we broaden the neurodiversity movement without weakening it? Participatory approaches as a framework for cross-disability alliance building. In A.C. Carey, J. M. Ostrove, & T. Fannon (Eds.), *Disability Alliances and Allies: Opportunities and Challenges, Research in Social Science and Disability* (vol. 12). United Kingdom: Emerald Group Publishing Limited.
- Dwyer, P.**, Saron, C. D., & Rivera, S. M. (2020). Identification of longitudinal sensory subtypes in typical and autism spectrum development using growth mixture modelling. *Research in Autism Spectrum Disorders*, 78: 101645. <https://doi.org/10.1016/j.rasd.2020.101645>
- Dwyer, P.**, Wang, X., De Meo-Monteil, R., Hsieh, F., Saron, C. D., & Rivera, S. M. (2020). Defining clusters of young autistic and typically developing children based on loudness-dependent auditory electrophysiological responses. *Molecular Autism*, 11: 48. <https://doi.org/10.1186/s13229-020-00352-3>
- Potter, L. A., Scholtze, D. A., Biag, H. M. B., Schneider, A., Chen, Y., Nguyen, D. V., Rajaratnam, A., Rivera, S. M., **Dwyer, P. S.**, Tassone, F., Choudharyi, N. S., Salcedo-

Arellano, M. J., & Hagerman, R. J. (2019). A randomized controlled trial of sertraline in young children with autism spectrum disorder. *Frontiers in Psychiatry 10*: 810. <https://doi.org/10.3389/fpsy.2019.00810>

Dwyer, P., Xu, B., & Tanaka, J. (2019). Investigating the perception of face identity in adults on the autism spectrum using behavioural and electrophysiological measures. *Vision Research, 157*, 132-141. <https://doi.org/10.1016/j.visres.2018.02.013>

Tanaka, J., **Dwyer, P.,** & Kyotani, H. (2017). Face processing in autism: Active avoidance of the eyes versus passive indifference. In F. Volkmar (Ed.), *Encyclopedia of Autism Spectrum Disorders* (2nd ed.). Advance online publication. https://doi.org/10.1007/978-1-4614-6435-8_102199-1

Posters and Presentations

Dwyer, P., Ferrer, E., Saron, C. D., & Rivera, S. M. (2020, October.) *Exploring sensory processing in typical development and autism spectrum development using factor mixture modelling and event-related potentials*. Virtual poster presentation accepted by the Society for Psychophysiological Research Annual Meeting, Vancouver, BC.

Dwyer, P., Wang, X., Hsieh, F., Saron, C. D., & Rivera, S. M. (2020, May). *Exploring heterogeneity in auditory electrophysiological responses of young autistic and typically-developing children using hierarchical clustering*. Oral presentation accepted by the INSAR 2020 Annual Meeting, Seattle, WA. Cancelled due to COVID-19 and presented as virtual poster.

Camp, E., **Dwyer, P.,** Sillas, A., & Rivera, S. M. (2020, May). *Using eye tracking and a standardized assessment to explore cognition in autism*. Virtual poster presentation at the UC Davis Undergraduate Research Conference, Davis, CA.

Cheriyian, C., Shevchuk, S., Riccio, A., Vincent, J., Kapp, S.K., **Dwyer, P.,** Cage, E., & Gillespie-Lynch, K. (2020, May). *Factors that influence career choice: Insights from a participatory study with autistic and non-autistic college students*. Poster accepted by the INSAR 2020 Annual Meeting, Seattle, WA. Cancelled due to COVID-19.

Diamond, E., **Dwyer, P.,** & William, Z. J. (2020, May). *Discrepancies in answering on suicide relevant questions between autistic adults and parents answering in their stead, an insight into risk and masking*. Poster accepted by the INSAR 2020 Annual Meeting, Seattle, WA. Cancelled due to COVID-19.

Prieto, M., **Dwyer, P.,** Sillas, A., & Rivera, S. M. (2020, May). *Examining attentional disengagement in autism using the gap-overlap paradigm*. Virtual poster presentation at the UC Davis Annual Psychology Conference, Davis, CA.

Riccio, A., Kapp, S. K., Cage, E., Vincent, J., DeNigris, D., Jordan, A., Delos Santos, J., **Dwyer, P.,** Kofner, B., Solomon, J., Hossain, M., Gillespie-Lynch, K. (2020, May). *An overview of university accommodations and supports for autistic students: A cross-institutional*

survey study. Poster accepted by the INSAR 2020 Annual Meeting, Seattle, WA. Cancelled due to COVID-19.

Sudayuworn, T., Lopez, G., **Dwyer, P.**, Sillas, A., & Rivera, S. M. (2020, May). *Using passive eye tracking to measure receptive language comprehension in autism*. Virtual poster presentation at the UC Davis Annual Psychology Conference, Davis, CA.

Tevelev, S., **Dwyer, P.**, Sillas, A., & Rivera, S. M. (2020, May). *An exploration of anxiety and threat bias in autism*. Virtual poster presentation at the UC Davis Annual Psychology Conference, Davis, CA.

Dwyer, P., Saron, C. D., & Rivera, S. M. (2020, April). *Examining inter-trial variability in, and habituation of, loudness-dependent auditory ERPs in young autistic and typically-developing children*. Poster accepted by the 53rd Gatlinburg Conference, San Diego, CA. Cancelled due to COVID-19.

Saron, C. D., Takarae, Y., Mohammad-Rezazadeh, I, De Meo-Monteil, R., **Dwyer, P.**, & Rivera, S. M. (2020, January). *Inter- and intra-individual variability in multisensory integration in autism spectrum development: A behavioral and electrophysiological study*. Invited symposium talk at Human Vision and Electronic Imaging 2020, Burlingame, CA.

Dwyer, P., De Meo-Monteil, R., Saron, C. D., & Rivera, S. M. (2019, October). *Age-related differences in auditory ERP responses to sounds of varying loudness in autism and typical development*. Poster presented at the Society for Neuroscience conference, Chicago, IL.

Dwyer, P., De Meo, R., Saron, C. D., & Rivera, S. M. (2019, May). *Relationships between auditory ERP responses and caregiver-reported sensory behaviours in young children with autism spectrum development*. Oral presentation at the INSAR 2019 Annual Meeting, Montréal, QC.

Diamond, E., Rediker, A., **Dwyer, P.**, & Diamond, J. M. (2019, May). *A new adult screening measure for autism: An international collaborative project and initial results*. Poster presented at the INSAR 2019 Annual Meeting, Montréal, QC.

Dwyer, P., Wang, X., De Meo-Monteil, R., Hsieh, F., Saron, C., & Rivera, S. M. (2019, April). *Investigating sensory subtypes using auditory ERPs in young children with autism and typical development*. In A. L. Hogan (Chair), *Neurophysiological indicators of ASD-related behavioral phenotypes*. Symposium at the 52nd Gatlinburg Conference, San Antonio, TX.

Dwyer, P., Wang, X., De Meo-Monteil, R., Hsieh, F., Saron, C., & Rivera, S. M. (2019, March). *Defining sensory subtypes in young children with autism or typical development using loudness-dependent auditory ERPs*. Poster presented at CNS 2019, San Francisco, CA.

Dwyer, P., De Meo-Monteil, R., Saron, C., & Rivera, S. M. (2018, October-November). *Heterogeneity in the auditory ERP responses of young, typically-developing children*.

Poster presented at the 51st Annual Meeting of the International Society for Developmental Psychobiology, San Diego, CA.

Dwyer, P., Burris, J. L., Bussey, T., & Rivera, S. (2018, April). *Using eye tracking to examine the receptive vocabulary of young children on the autism spectrum.* Poster presented at the 51st Gatlinburg Conference, San Diego, CA.

Dwyer, P., Xu, B., & Tanaka, J. (2017, May). *Investigating neural sensitivity to face identity in adults with Autism Spectrum Disorder (ASD) using EEG.* Oral presentation at the 2017 NorthWest Cognition And Memory (NOWCAM) conference, Vancouver, BC.

Dwyer, P., Xu, B., & Tanaka, J. (2017, April). *Investigating neural sensitivity to face identity in adults with Autism Spectrum Disorder (ASD) using EEG.* Oral presentation at Making Waves 2017: An Undergraduate Psychology Research Conference, Victoria, BC.

Dwyer, P., Baldassari, M., & Lindsay, D. S. (2016, May). *People with autism: lineup identification and facial recognition memory.* Oral presentation (speed talk) at the 2016 NorthWest Cognition And Memory (NOWCAM) conference, Vancouver, BC.

Dwyer, P., Yadeta, J., Xu, B., & Tanaka, J. W. (2016, April). *Perception and production of facial expressions by children with autism.* Poster presented at the Psychology Students Of Vancouver Island Poster Session (PSOVIPS), Victoria, BC.

Dwyer, P., Baldassari, M., & Lindsay, D. S. (2016, March). *People with autism: lineup identification and facial recognition memory.* Poster presented at the Jamie Cassels Undergraduate Research Fair, University of Victoria.

Dwyer, P., Muncherji, S., Kara, S., Rosenbaum, J., & Baldassari, M. (2015, April). *Subjective reports of memory for lineup rejections.* Poster presented at the Psychology Students Of Vancouver Island Poster Session (PSOVIPS), Victoria, BC.

Additional Public Presentations

November 2020..... Co-organizer and panelist, 2nd UC Davis Center for Mind and Brain/ MIND Institute Neurodiversity Summit. Virtual event.

October 2020 Panelist, Student Panel, College Autism Summit. Virtual event.

August 2020..... Facilitator, INSAR Virtual Workshop: Autistic Researchers Committee.

February 2020..... Waisman, T.C., Gassner, D., Gillespie-Lynch, K., Den Houting, J., Kapp, S., Nachman, B., Shore, S., & **Dwyer, P.** (2020). *Autism training for INSAR 2020.* Developed by INSAR's Autistic Researchers Committee.

February 2020..... Guest lecturer, UC Davis FRS 002-022 (Seminar on Autism and Neurodiversity)

December 2019..... Panelist, UC Davis EDU 115 (Educating Children with Disabilities)

November 2019..... **Dwyer, P.,** Kofner, B., Daou, N., Obeid, R., & Gillespie-Lynch, K. *Learning from the neurodiversity movement: How to identify socially valid*

- treatment goals.* Invited Zoom talk at the Department of Hearing and Speech Sciences of the University of Maryland. College Park, MD.
- November 2019..... Solomon, M., **Dwyer, P.**, Wood, J., & Brookman-Frazee, L. (2019). *Supporting social emotional and mental health well-being of individuals with autism.* Invited keynote panel, California Autism Professional Training and Information Network (CAPTAIN) Summit. Sacramento, CA.
- August 2019..... **Dwyer, P.** (Facilitator), Almeda, J., Diaz-Covert, D., Guillaume, J., Harmetz, M., Parker, A., & Zulli, A. (2019). *Autism from the inside out: Personal perspectives about challenges and successes shared by self-advocates with autism.* Invited keynote panel at the MIND Summer Institute on Neurodevelopmental Disorders: Research to Practice. Davis, CA.
- July 2019 Gillespie-Lynch, K., **Dwyer, P.**, Kofner, B., & Cintula, T. (2019). *Recognizing neurological differences as invaluable aspects of human diversity: Learning from the neurodiversity movement how to promote effective communication and alleviate stigma.* Invited talk at the National Stuttering Association Research Symposium: Stuttering: Perspectives on Disability, Diversity and Culture. Fort Lauderdale, FL.
- May 2019..... Co-organizer and speaker (**Dwyer, P.**, “Neurodiversity: Can we help people without calling them broken?”), 1st UC Davis Center for Mind and Brain/ MIND Institute Neurodiversity Summit. Sacramento, CA.
- May 2019..... Invited panelist, UC Davis, *Inaccessible Institutions: A Symposium on Disability and Neurodivergence.* Davis, CA.
- May 2019..... Invited presenter, Bellevue College, *Imagine Your Future in STEM: Autism in STEM: Fostering Balanced and Inclusive Communities at School and at Work.* Bellevue, WA.
- March 2019, 2020.. Guest lecturer, UC Davis, PSC 148 (Neurodevelopmental Disorders)
- June 2017..... Guest presentation, University of Victoria (UVic), ED-D 539B (Leadership, Education, and Diversity)
- January 2017..... Speaker in Tanaka, J. (moderator), *Blows against the academy: shifting definitions of scholarship.* Symposium conducted at UVic Provost’s Diversity Research Forum: Re-imagining Identities, Power, and Privilege, Victoria, BC.
- October 2015 ACT-Autism Community Training, Panel Discussion on Thriving. Vancouver, BC.
- April 2015..... ACT-Autism Community Training, Panel Discussion on Advocacy. Vancouver, BC.
- March 2014, 2015.. Guest presentation, University of Victoria (UVic), PSYC 100B (Introductory Psychology II)
- March 2014..... Guest presentation, Camosun College, CSEA 140 (Development and Diversity)

Society Memberships

International Society for Autism Research (INSAR)

College Autism Network (CAN) / NASPA

CogNeuro Society (CNS)

Society for Psychophysiological Research (SPR)

Society for Neuroscience (SFN)

Journals

Ad hoc reviewer..... *Autism in Adulthood, Research in Autism Spectrum Disorders, Molecular Autism*

Editor..... *Autism's Own Journal*

Computer Skills

MS Word, MS Excel, MS PowerPoint, MS Teams, Zoom, Slack, Trello, RStudio, MATLAB (including EEGLAB, ERPLAB, FieldTrip), Python, MPlus, SPSS, CARTOOL, BESA