# Mark A. Sabbagh

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#### **Education**

- 1998 Ph.D. University of Oregon, Eugene M.Sc. University of Oregon, Eugene 1996
- 1993 B.Sc. University of California, Santa Cruz

### **Positions**

2000-pres. Assistant to Full Professor, Queen's University at Kingston 2013-2014 Visiting Professor, University of California, San Diego 2007-2008 Visiting Professor, University of California, Santa Cruz 1999-2000 NICHD Postdoctoral Fellow, University of Michigan

## **Grant Awards for Research**

New Frontiers in Research Fund — Exploration (\$250,475) 2022-2024 Understanding the neurobiology of social distancing and the impact of staying digitally connected 'online'

J Gallivan, A Tusche, F De Felice, V Kuhlmeier, A Winterborn, M Pare, M Sabbagh

- 2022-2023 New Frontiers in Research Fund — COVID Response (\$237,970) The ROSie app: A novel, mobile computing device application to support developmental psychology recruitment, outreach, and studies J Sommerville, MA Sabbagh (co-PIs), C Atance, S Graham, JK Hamlin, O
  - Friedman
- 2021-2023 Queen's University VPR: Wicked Ideas (\$75,000) Charting the neurobiology of social distancing: Exploring the causal effects of social isolation on the brain and the impact of staying digitally connected 'online'

J Gallivan, A Tusche, G Blohm, S Boehnke, F De Felice, V Kuhlmeier, D Munoz, MA Sabbagh, A Winterborne

2019–2023 SSHRC (\$213,731)

Individual differences in adult theory of mind

KL Harkness, MA Sabbagh

2018–2021 CIHR (\$464,669)

Tuning in and turning on: Neuro-cognitive correlates of responsive sexual

desire in women with and without sexual difficulties

ML Chivers, S Dawson, JS Huberman, MA Sabbagh, R Todd

2018–2023 NSERC (\$150,000)

Neurodevelopmental bases of conceptual change

MA Sabbagh

2015–2018 SSHRC (\$138,384)

Mechanisms of selective social learning in preschool-aged children

MA Sabbagh

2015 NSERC (\$108,490)

High-density brain electrophysiological recording for Queen's University

MA Sabbagh, N Troje, ML Chivers, T Hollenstein

2012 NSERC (\$60,323)

A high-speed high-definition video imaging facility for Queen's University

WA Take, N Hoult, MA Sabbagh

2012–2017 SSHRC (\$90,752)

Individual differences in adult theory of mind

KL Harkness, MA Sabbagh

2011–2015 NSERC (\$235,000)

Experience, biology, and the development of a theory of mind

MA Sabbagh

2011–2014 NSERC Discovery Accelerator Supplement (\$125,000)

2010–2014 SSHRC (\$102,00)

Conventionality and knowledge acquisition

MA Sabbagh

2006–2009 SSHRC (\$90,300)

Conventionality and word learning

MA Sabbagh

2006–2010 NSERC (\$124,800)

Neurocognitive bases of theory-of-mind development

MA Sabbagh

2002–2005 SSHRC (\$68,000)

Cultural experience and theory-of-mind development MA Sabbagh

2002–2006 NSERC (\$80,000)

Conceptual, cognitive, and neurobiological correlates of preschoolers' understanding of knowledge

MA Sabbagh

2000 CFI/OIT (\$310,000)

Integrated brain and behavioural science laboratory MA Sabbagh, KL Harkness

## **Awards for Conferences & Workshops**

2012 SSHRC

The Jean Piaget Symposia: Rethinking cognitive development MA Sabbagh

2007 SSHRC

Selective Social Learning MA Sabbagh, S Fitneva

### **Journal Publications**

In Prep Under Review Sabbagh, M. A. (in preparation). Grading evidence in cognitive developmental psychology.

Harkness, K. L., Hudson, C. C., Saperia, S., Shamblaw, A. L., & Sabbagh, M. A. (in preparation). Theory of mind and depression: From symptoms to syndrome.

Hilton, B. C. & Sabbagh, M. A. (revision requested). Preschoolers use probabilistic evidence to flexibly change or maintain beliefs on an active search task. *Child Development*.

Atkinson, C., Campbell, A., Hilton, B. C. & Sabbagh, M. A. (submitted). Social touch, theory of mind and executive functioning in preschool-aged children. *Developmental Psychology* 

Hudson, C., Sabbagh, M. A., & Harkness, K. L. (in press). How theory of mind indirectly leads to positive first impressions. *Journal of Experimental Psychology:*General

2022 Mangardich, H. & Sabbagh, M. A. (2022). Event-related potential studies of cross-situational word learning in four-year-old children. *Journal of Experimental Child Psychology*. doi: 10.1016/j.jecp.2022.105468

- Huberman, J. S., Mangardich, H., Sabbagh, M. A., & Chivers, M. L. (2022). ERP responses to sexual cues in young women attracted to men. *Psychophysiology*. doi: 10.1111/psyp.14162
- Mangardich, H., Tollefson, N., Harkness, K. L., & Sabbagh, M. A. (2021).
  Theory of mind in dysphoric and non-dysphoric adults: An ERP study of true-and false-belief reasoning. *Social Neuroscience*. doi:
  10.1080/17470919.2021.2005678
  - Bardikoff, N. F. & Sabbagh, M. A. (2021). Practice thinking about multidimensionality promotes 3-year-old children's performance on the Dimensional Change Card Sort Task. *Child Development*.
- Yuile, A. R. & Sabbagh, M. A. (2020). Inhibitory control and preschoolers' use of irregular past tense verbs. *Journal of Child Language*, 1-19. doi:10.1017/S0305000920000355
  - Hudson, C. C., Shamblaw, A. L., Harkness, K. L., & Sabbagh, M. A. (2020). Valence in the reading the mind in the eyes task. *Psychological Assessment*, 42(7), 623–634. https://doi.org/10.1037/pas0000818
- Bowman, L. C., Dodell-Feder, J., Saxe, R. & Sabbagh, M. A. (2019) Continuity in the Neural System Supporting Children's Theory of Mind Development: Longitudinal links between task-independent EEG and task-dependent fMRI. *Developmental Cognitive Neuroscience*, 40. https://doi.org/10.1016/j.dcn.2019.100705
  - Mo, S., Liang, L., Bardikoff, N. F., & Sabbagh, M. A. (2019). Shifting visual attention to social and non-social stimuli in Autism Spectrum Disorders. *Research in Autism Spectrum Disorders*, 65, 56–64. https://doi.org/10.1016/j.rasd.2019.05.006
  - Shamblaw, A., Benson, J. E., Harkness, K. L., & Sabbagh, M. A. (2019). Maternal depression and preschoolers' false belief understanding. *Social Development*. https://doi.org/10.1111/sode.12369
  - Sjaarda, C. P., Sabbagh, M. A., Wood, S., Ward-King, J., McNaughton, A. J. M., Hudson, M. L., Tao, M., Ayub, M., & Liu, X. (2019). Homozygosity for the 10-repeat dopamine transporter (*DAT1*) allele is associated with reduced EEG response in males with ASD. *Research in Autism Spectrum Disorders*, 60, 25–35. https://doi.org/10.1016/j.rasd.2018.12.003
- 2018 Hudson, C. C., Shamblaw, A., Wilson, G. A., Roes, M. M., Sabbagh, M. A., & Harkness, K. L. (2018). Theory of mind, excessive reassurance-seeing, and stress generation in depression: A social-cognitive-interpersonal integration. *Journal of Social and Clinical Psychology*, 27, 725–750.

- https://doi.org/10.1521/jscp.2018.37.9.725
- Rnic, K., Sabbagh, M. A., Washburn, D., Bagby, R. M., Ravindran, A., Kennedy, J. L., Strauss, J., & Harkness, K. L. (2018). Childhood emotional abuse, physical abuse, and neglect are associated with theory of mind decoding accuracy in young adults with depression. *Psychiatry Research*, 268, 501–507. https://doi.org/10.1016/j.psychres.2018.07.045
- Sabbagh, M. A. & Paulus, M. (2018). Editorial: Replication studies of infant false belief. *Cognitive Development*, 46, 1–3. https://doi.org/10.1016/j.cogdev.2018.07.003
- Mangardich, H. & Sabbagh, M. A. (2018). Children remember words from ignorant speakers but do not attach meaning: Evidence from event-related potentials. *Developmental Science*, e12544. https://doi.org/10.1111/desc.12544
- Sabbagh, M. A., Koenig, M. A., & Kuhlmeier, V. A. (2016). Conceptual constraints and mechanisms in children's selective social learning. *Developmental Science*. doi: 10.1111/desc.12415
  - Zahavi, A. Y., Sabbagh, M. A., Washburn, D., Mazurka, R., Laroque, C. L., Bagby, R. M., Strauss, J., Kennedy, J. L., Ravindran, A., & Harkness, K. L. Serotonin and dopamine gene variation and theory of mind decoding accuracy in major depression. *PLoS One, 11*, Article ID e0150872
- Tahiroglu, D., Moses, L. J., Carlson, S. M., Olafson, E., Mahy, C. E. V. & Sabbagh, M. A. (2014). The Children's Social Understanding Scale: Construction and validation of a parent-report measure for assessing individual differences in children's theories of mind. *Developmental Psychology*, 50, 2485-2497.
  - Mo, S., Su, Y., Sabbagh, M. A., & Xiu, J. (2014). Sentential complements and false belief understanding in Chinese Mandarin-speaking preschoolers: A training study. *Cognitive Development*, 29, 50-61.
- 2013 Xu, F., Han, Y., Sabbagh, M. A., Wang, T., Ren, X., & Li, C. (2013). Developmental differences in the structure of executive function in middle childhood and adolescence. *PLoS One, 8,* E77770.
  - Koenig, M. & Sabbagh, M. A. (2013). Selective Social Learning: New perspectives on learning from others. *Developmental Psychology*, 49, 399-403.
  - Henderson, A. M. E., Sabbagh, M. A., & Woodward, A. L. (2013). Preschoolers' selective learning is guided by the principle of relevance. *Cognition*, 126, 246-257.
  - Benson, J. E., Sabbagh, M. A., Carlson, S. M. & Zelazo, P. D. (2013). Individual

- differences in executive functioning predict preschoolers improvement from theory-of-mind training. *Developmental Psychology*, 49, 1615-1627.
- Akhtar, N., Menjivar, J., Hoicka, E. & Sabbagh, M. A. (2012). Learning foreign labels from a foreign speaker: The role of (limited) exposure to a second language. *Journal of Child Language*, 39, 1135-1149.
  - Harkness, K. L., Jacobson, J. A., Sinclair, B., Chan, E. & Sabbagh, M. A. (2012). For love or money? What motivates people to know the minds of others. *Cognition and Emotion*, 26, 541-549.
  - Lackner, C. L., Sabbagh, M. A., Hallinan, E., Liu, X., & Holden, J. J. E. (2012). Dopamine receptor D4 gene variation predicts preschoolers' developing theory of mind. *Developmental Science*, 15, 272-280.
- Harkness, K. L., Washburn, D., Theriault, J., Lee. L., & Sabbagh, M. A. (2011). Maternal history of depression is associated with enhanced theory of mind in depressed and nondepressed adult women. *Psychiatry Research*, 189, 91-96.
- Sabbagh, M. A., Hopkins, S. F. R., Benson, J. E., & Flanagan, J. R. (2010). Conceptual change and preschoolers' theory of mind: Evidence from load-force adaptation. *Neural Networks*, 43, 1043-1050.
  - Harkness, K. L., Jacobson, J. A., Duong, D. & Sabbagh, M. A. (2010). Mental state decoding in remitted major depression: Effects of sad versus happy mood induction. *Cognition and Emotion*, 24, 497-513.
  - Lackner, C. L., Bowman, L. C. & Sabbagh, M. A. (2010). Dopaminergic functioning and preschoolers' theory of mind. *Neuropsychologia*, 48, 1767-1774.
  - Henderson, A. M. E. & Sabbagh, M. A. (2010). Parents use of conventional and unconventional labels in conversations with their preschoolers. *Journal of Child Language*, 37, 793-816.
- Sabbagh, M. A. & Shafman, D. (2009). How children block learning from ignorant speakers. *Cognition*, 112, 415-422.
  - Saylor, M. M., Sabbagh, M. A., Fortuna, A., & Troseth, G. (2009). Preschoolers use speakers' preferences to learn words. *Cognitive Development*, 24, 125-132.
  - Sabbagh, M. A., Bowman, L. C., Evraire, L. & Ito, J. M. B. (2009). Neurodevelopmental bases of preschoolers' theory-of-mind development. *Child Development*, 80, 1147-1162.
  - Liu, D., Sabbagh, M. A., Gehring, W. J, & Wellman, H. M. (2009). Neural correlates of theory of mind reasoning in adults and children. *Child Development*, 80, 318-326.

- 2008 Liu, D., Wellman, H. M., Tardif, T., & Sabbagh, M. A. (2008). Theory of mind development in Chinese children: A meta-analysis of false-belief understanding across languages and cultures. *Developmental Psychology*, 44, 523-531.
  - Sabbagh, M. A. & Seamans, E. L. (2008). Intergenerational transmission of theory-of-mind. *Developmental Science*. 11, 354-360.
- 2007 Kalish C. W. & Sabbagh, M. A. (2007). Conventionality and cognitive development: Learning to think the right way. *New Directions for Child and Adolescent Development*, 115, 1-9.
  - Sabbagh, M. A. & Henderson, A. M. E. (2007). How an appreciation of conventionality shapes early word learning. *New Directions for Child and Adolescent Development*, 115, 25-38.
- Sabbagh, M. A. & Flynn, J. (2006). Mid-frontal EEG alpha asymmetries predict individual differences in one aspect of theory of mind: Mental state decoding. *Social Neuroscience*, 1, 299-308.
  - Sabbagh, M. A., Moses, L. J., & Shiverick, S. M. (2006). Executive functioning and preschoolers' understanding of false beliefs, false photographs, and false signs. *Child Development*, 77, 1034-1049.
  - Sabbagh, M. A., Xu, F., Carlson, S. M., Moses, L. J., & Lee, K. (2006). Executive functioning and theory of mind in preschool children from Beijing, China: Comparisons with U.S. preschoolers. *Psychological Science*, 17, 74-81.
- 2005 Lee, L., Harkness, K. L., Sabbagh, M. A., & Jacobson, J. A. (2005). Mental state decoding abilities in clinical depression. *Journal of Affective Disorders*, 86, 247-258.
  - Harkness, K. L., Sabbagh, M. A., Jacobson, J. A., Chowdrey, N., & Chen, T. (2005). Sensitivity to subtle social information in dysphoric college students: Evidence for an enhanced theory of mind. *Cognition and Emotion*, *19*, 999-1026. (order of 1st two authors is alphabetical).
- Callanan, M. A. & Sabbagh, M. A. (2004). Multiple labels in conversations between young children and their mothers. *Developmental Psychology*, 40, 746-763.
  - Sabbagh, M. A. (2004). Recognizing and reasoning about mental states: Understanding orbitofrontal contributions to theory of mind and autism. *Brain and Cognition*, 55, 209-219.
  - Liu, D., Sabbagh, M. A., Gehring, W. J., & Wellman, H. M. (2004). Decoupling beliefs from reality in the brain: An ERP study of theory of mind. *NeuroReport.* 15, 991-995.

- Saylor, M. M. & Sabbagh, M. A. (2004). Different kinds of information affect word learning in the preschool years: The case of part-term learning. *Child Development*, 75, 395-408.
- Sabbagh, M. A., Moulson, M., & Harkness, K. L. (2004). Neural correlates of mental state recognition in human adults: An ERP study. *Journal of Cognitive Neuroscience*, 16, 415-426.
- Sabbagh, M. A., Wdowiak, S. & Ottaway, J. M. (2003). Do word learners ignore ignorant speakers? *Journal of Child Language*, 30, 905-924.
- Saylor, M. M., Sabbagh, M. A., & Baldwin, D. A. (2002). Children use implicit contrast as a pragmatic cue to word meaning. *Developmental Psychology*, 38, 993-1103.
- Sabbagh, M. A. & Baldwin, D. A. (2001). Learning words from knowledgeable versus ignorant speakers: Links between preschoolers' theory of mind and semantic development. *Child Development*, 72, 1054-1070.
- Sabbagh, M. A. & Gelman, S. A. (2000). Buzzsaws and Blueprints: What children need (or don't need) to learn language. *Journal of Child Language*, 22, 715-726. Followed by commentary and response.
  - Sabbagh, M. A. & Taylor, M. (2000). Neural correlates of theory of mind reasoning in adults: An event-related potential study. *Psychological Science*, 11, 46-50.
- 1999 Callanan, M. A., Cervantes, C. A. & Sabbagh, M. A. (1999). Conversation and conceptual development: Challenges, alternatives and future directions. *Human Development*, 42, 356-361.
  - Sabbagh, M. A. (1999). Communicative intentions and language: Evidence from right hemisphere damage and autism. *Brain and Language*, 70, 29-69.
  - Sabbagh, M. A. & Clegg, B. A. (1999). Some costs of assimilating data to the implicit/explicit distinction. *Behavioral and Brain Sciences*, 22, 783-784.
- Sabbagh, M. A. & Callanan, M. A. (1998). Metarepresentation in action: Children's theories of mind developing and emerging in parent-child conversations. *Developmental Psychology*, 34, 491-502.
- Taylor, M. & Sabbagh, M. A. (1996). Review of Children Talk About the Mind. *Merrill-Palmer Quarterly*, 42, 612-619.

## **Book Chapters**

Sabbagh, M. A. (2019). Cognitive Development. In J. Benson (Ed.) Encyclopedia of Infant and Early Childhood Development (2nd Ed.).

- Sabbagh, M. A. & Bowman, L. C. (2018). Theory of mind. In S. Ghetti (Ed.) Stevens' Handbook of Experimental Psychology and Cognitive Neuroscience (4th ed.). New York: Wiley.
- Mangardich, H. M. & Sabbagh, M. A. (2017). Mechanisms of selective social learning: Evidence and implications. To appear in M. M. Saylor & P. Ganea (Eds.) Language and Concept Development from Infancy Through Childhood: Social Motivation, Cognition, and Linguistic Mechanisms of Learning.
  Bardikoff, N. F. & Sabbagh, M. A. (2017). The differentiation of executive functioning across development: Insights from developmental cognitive neuroscience. In N. Budwig, E. Turiel, & P. D. Zelazo (Eds.), New Perspectives On Human Development (p. 47–66). Cambridge University Press.
- Schell, V. E. & Sabbagh, M. A. (2016). Theory of mind and communication: Developmental perspectives. In A. Bar-On & D. Ravid (Eds.). *Handbook of communication disorders: Theoretical, empirical and applied linguistics perspectives*. Berlin: De Gruyter Mouton.
- Sabbagh, M. A. (2015). Dopamine and theory of mind development. In J. Sommerville & J. Decety (Eds.) *Social Cognition: Frontiers in Developmental Science*. New York: Psychology Press.
- Sabbagh, M. A. (2013). Brain electrophysiological studies of theory of mind. In S. Baron-Cohen, & H. Tager-Flusberg (Eds.). *Understanding Other Minds, 3rd Ed* (pp. 119-131). Oxford: Oxford University Press.
  - Henderson, A. M. E. & Sabbagh, M. A. (2013). Learning words from experience: An integrated framework. In L. Gogate & G. Hollich (Eds.), Theoretical and computational models of word learning: Trends in Psychology and Artificial Intelligence
  - Sabbagh, M. A. & Henderson, A. M. E. (2013). Children are selective word learners. In M. Banaji & S. A. Gelman (Eds.) *Navigating the Social World*.
- Sabbagh, M. A., Benson, J. E., & Kuhlmeier, V. A. (2012). False belief understanding in infants and preschoolers. In M. Legerstee, D. Haley, & M. Bornstein (Eds.) *The Infant Mind.* Guilford Press.
- 2009 Benson, J. E. & Sabbagh, M. A. (2009). Theory of mind and executive functioning: A developmental neuropsychological approach. In P. Zelazo, E. Crone & M. Chandler (Eds.). *Developmental social cognitive neuroscience*.
- 2008 Baldwin, D. A., Loucks, J. & Sabbagh, M. A. (2008). Pragmatics of human action. In T. F. Shipley & J. Zacks (Eds.), *Understanding Events: How humans see, represent and act on events.*

- 2007 Moses, L. J. & Sabbagh, M. A. (2007). Interactions between domain specific and domain general processing in the development of children's theory of mind. In M. J. Roberts (Ed.) *Integrating the mind: Domain general versus domain specific processes in higher cognition* (pp. 275-291). New York: Psychology Press.
- Sabbagh, M. A., Henderson, A. M. E. & Baldwin, D. A. (2006). What infants' understanding of referential intentions tells us about the neuro-cognitive underpinnings of word learning. In R. Flom, K. Lee, & D. Muir (Eds), *Gaze-Following: Its development and significance* (pp. 171-192). Mahwah, NJ: Erlbaum.

Sabbagh, M. A. (2006). Neurocognitive bases of preschoolers' theory-of-mind development: Integrating cognitive neuroscience and cognitive development. In P. Marshall & N. Fox (Eds.). *The Development of Social Engagement:* Neurobiological Perspectives. Oxford: Oxford University Press.

Moses, L. J., Carlson, S. M., & Sabbagh, M. A. (2005). On The Specificity of the Relation between Executive Function and Children's Theories of Mind. In W. Schneider, R. Schumann-Hengsteler & B. Sodian (Eds.), Young Children's Cognitive Development: Interrelationships among Executive Functioning, Working Memory, Verbal Ability, and Theory of Mind (pp. 131-145). Mahwah, NJ: Erlbaum.

Sabbagh, M. A. & Baldwin, D. A. (2005). Understanding the role of perspective taking in young children's word learning. In N. Eilan, C. Hoerl, T. McCormack, & J. Roessler (Eds.). *Joint Attention: communication and other minds.* Oxford: Oxford University Press.

Saylor, M. M., Baldwin, D. A., & Sabbagh, M. A. (2004). Coordinating multiple sources of information in word learning. In G. Hall & S. Waxman (Eds.) *Weaving a Lexicon*. Cambridge, MA: MIT Press.

## **Conference Presentations (recent)**

JPS 2023 Madrid, Spain Sabbagh, M. A. Children's brains show us how they understand the mind (Invited Symposium)

Payumo, M. & Sabbagh, M. A. Beta EEG activity and false-belief reasoning in preschoolers. (Poster)

CPA 2022 Calgary, AB Hilton, B. C., & Sabbagh, M. A. Preschoolers revise a location bias gradually in response to feedback. (Talk)

CDS 2022 Madison, WI Hilton, B. C., & Sabbagh, M. A. The temporal dynamics of belief revision in preschoolers (Poster)

SRP 2022	Gallagher, A. G., Sabbagh, M. A., Rowe, J. R., Harkness, K. L. Theory of mind and depression: Investigating egocentric bias as a mechanism for facilitating accurate decoding of others' mental states (Poster)
SRP 2021 Virtual Meeting	Gallagher, A., Harkness, K. L., Sabbagh, M. A., & Olexa, B. How can I know you if I don't know myself? Low awareness of cognition impairs perspective taking in depression. (Poster)
SRCD 2021 Virtual Meeting	Sabbagh, M. A., Atkinson, C., & Hilton, B. Belief change from exploration in preschool-aged children. (Talk)
APS 2021 Virtual Meeting	Hudson, C., Sabbagh, M. A., & Harkness, K. L. Theory of Mind Matters: Social Outcomes of Individual Differences in Theory of Mind. (Talk)
CSRF 2020 Virtual Meeting	Huberman, J. S., Mangardich, H., Sabbagh, M. A., & Chivers, M. L. Ready for Action: An ERP Signal for Detecting Sexual Readiness. (Talk)
CDS 2019 Louisville, Ky	Sabbagh, M. A. Claims and Evidence. Invited talk presented at the Open Science preconference.
JPS 2019 Portland, OR	Sabbagh, M. A. Can theory of mind make us feel connected? Invited talk presented at Social Cognition Preconference. q Sabbagh, M. A. & Atkinson, C. How experience and biology work together to shape theory of mind development. (Talk)
SRCD 2019 Baltimore MD	Sabbagh, M. A. & Mangardich, H. Neurocognitive mechanisms for selective social learning: ERP Studies. (Talk)
Development 2018 St. Catherines, ON	Mangardich, H. & Sabbagh, M. A. Cognitive mechanisms underlying children's selectivity towards socio-culturally irrelevant words (Talk)
	Bardikoff, N. F. & Sabbagh, M. A. Using multidimensionality to scaffold DCCS performance (Talk)
	Bardell, T., McCreary, B., Zhao, N. & Sabbagh, M. A. Natural irregular movement and theory of mind in preschoolers (Poster)
FLUX 2018 Berlin, Germany CDS 2017 Portland, OR	Sabbagh, M. A. How children change their minds (about minds) (Invited Talk).
	Atkinson, C. A., Flanagan, J. R. & Sabbagh, M. A. The development of processes associated with belief change over the preschool years. (Poster)
	Mangardich, H. & Sabbagh, M. A. Children ignore words for novel objects that are socio-culturally irrelevant. (Poster)
IASR 2017 Charleston, SC	Huberman, J. S., Mangardich, H., Sabbagh, M. A., & Chivers, M. L. Sex on the brain? A neural investigation of women's sexual response. (Talk)
SRP 2017 Denver, CO	Hudson, C. A., Shamblaw, A. L., Sabbagh, M. A. & Harkness, K. L. A model

of interpersonal dysfunction in depression: The relations among theory of mind, excessive reassurance seeking and interpersonal stress. (Poster)

SRCD 2017 Austin, TX Sabbagh, M. A., Quistberg, K., & Sobel, D. M. Processes of conceptual change in preschool-aged children: Neurobiological and computational perspectives. (Talk)

Mangardich, H., Benson, J. E., & Sabbagh, M. A. Neurodevelopmental correlates of theory of mind reasoning in 3.5-year-old children. (Poster)

Bardkoff, N. & Sabbagh, M. A. A brief training about the attributes of objects improves 3-year-olds' performance on the Dimensional Change Card Sort Task. (Poster).

Yuile, A. R. & Sabbagh, M. A. Neurodevelopmental correlates of perspective taking during role play. (Poster)

Atkinson, C. L., Ho, J. K., & Sabbagh, M. A. Preschool-aged children show improved executive functioning performance following affectionate contact from a caregiver. (Poster)

Quistberg, K. & Sabbagh, M. A. Developmental changes in preschoolers' abilities to change their beliefs in response to prediction-outcome mismatch events. (Strategic Plan Poster)

BUCLD 2016 Boston, MA Yuile, A. R. & Sabbagh, M. A. Inhibitory control is a rate-limiting factor to preschoolers' use of irregular inflection. (Talk)

SRP 2016 Baltimore, MD Hudson, C. C., Shamblaw, A. L., Sabbagh, M. A., & Harkness, K. L. A model of interpersonal dysfunction in depression: The relation among theory of mind, excessive reassurance seeking and interpersonal dysfunction. (Poster)

CPA 2016 Victoria, BC Shamblaw, A. L., Benson, J. E., Sabbagh, M. A., & Harkness, K. L. Intergenerational transmission of depression: The role of social cognition. (Talk)

ISRCAP 2015 Portland, OR Shamblaw, A., Benson, J. E., Sabbagh, M. A. & Harkness, K. L. Maternal depression and children's theory of mind understanding. (Poster)

JPS 2015 Toronto, ON Mangardich, H. & Sabbagh, M. A. Cognitive mechanisms underlying children's selective learning. (Talk)

SRCD 2015 Philadelphia, PA Bardikoff, N. & Sabbagh, M. A. Neurodevelopmental correlates of executive functioning in preschool aged children. (Poster)

Drover, S. M. & Sabbagh, M. A. Young children's understanding of false belief: P3b responses in an implicit false belief task (Poster)

Mangardich, H. & Sabbagh, M. A. Neurophysiological correlates of selective

word learning in 6-year-olds. (Poster)

Sabbagh, M. A. Scope and prescriptive force in young children's reasoning about conventions. (Talk)

Schell, V. E., Mackintosh, T., & Sabbagh, M. A. Gender effects in children's compliance with social conventions. (Poster)

SRP 2014 Evanston, IL Harkness, K. L., Sabbagh, M. A., Zahavi, A. & Kennedy, J. The neural architecture of theory of mind in depression: Brain electrophysiological correlates. (paper)

Development 2014 Ottawa, ON Mangardich, H. & Sabbagh, M. A. Neural correlates of children's selective learning.

Drover, S. M. & Sabbagh, M. A. Developmental shifts in young children's P<sub>3</sub>b responses to socially-unexpected events.

IMFAR 2013 San Sebastian, ES Li, A. S., Sabbagh, M. A., & Kelley, E. A. (2013). How do children with autism spectrum disorders solve false belief tasks? Insights from an EEG study. (Poster)

SRCD 2013 Seattle, WA Benson, J. E., Sabbagh, M. A., Carlson, S. M., & Zelazo, P. D. Executive functioning supports the emergence of explicit theory of mind understanding in preschoolers: Evidence and mechanisms. (Talk)

Christopher, A. & Sabbagh, M. A. Affectionate contact and theory of mind in parent-child dyads. (Poster)

Mackintosh, T. & Sabbagh, M. A. Age-related changes in preschoolers identification of conventional versus idiosyncratic behavior in games. (Poster)

Merwin, K., Kuhlmeier, V. A., & Sabbagh, M. A. Three-year-olds overimitate when actions are presented as conventions. (Poster)

Sabbagh, M. A. & Henderson, A. M. E. Eye-tracking evidence regarding how preschoolers manifest selective learning in different contexts. (Talk)

SfN 2012 New Orleans, LA Drover, S. & Sabbagh, M. A. (2012, October). Expectation and surprise during theory of mind reasoning: an event-related potential study. (Poster) Also presented at a pre-conference hosted by the Society for Social Neuroscience.

SRCD 2011 Montreal, QC Sabbagh, M. A. Genetic influences on social perception, social cognition and social behaviour. (Symposium Chair)

Lackner, C. L., Sabbagh, M. A., Hallinan, E. V., Liu, X. & Holden, J. Dopamine receptor D4 variation predicts preschoolers' developing theory of mind. (Talk)

Sabbagh, M. A. Neurodevelopmental bases of theory of mind in preschool-aged children. (Talk)

Sabbagh, M. A., Hopkins, S. F. R., Rajaprakash, M. & Benson, J. E. Adjusting

expectations: Understanding the role of the right temporal parietal juncture in representational theory of mind (Talk).

SRP 2010 Washburn, D. S., Theriault, J., Lee, L., Sabbagh, M. A., & Harkness, K. L.

Maternal History of Depression Associated with Enhanced Theory of Mind in Depressed and Non-Depressed Adult Women. (Poster)

Denver, CO

Lackner, C. L., Hallinan, E. V., & Sabbagh, M. A. Dopaminergic functioning predicts response-conflict task performance in preschool children. (Poster)

Sabbagh, M. A., Harkness, K. L., Jacobson, J. A. & Duong, D. Are depressed people better mind-readers? Evidence for enhanced theory of mind decoding in mild to moderate depression. (Talk)

Benson, J. E. & Sabbagh, M. A. Individual differences in executive functioning predict preschoolers' improvement from false belief training. (Poster)

Hallanan, E. V., Lackner, C. L. & Sabbagh, M. A. Ontogenetic relations among preschoolers' reasoning about signs signals and beliefs. (Poster)

Tahiroglu, D., Moses, L. J., Carlson, S. M., & Sabbagh, M. A. Can parents report on their children's mental state understanding? Construction of a parent-report theory of mind scale. (Poster)

Henderson, A. M. E., Sabbagh, M. A., Woodward, A. L., & Saby, J. Retrieval cues do not help preschoolers remember the name of an object from a foreign country. (Poster)

#### **Invited Talks**

- 2023 Trinity College (Dublin, Ireland)
- 2022 University of Michigan
- 2021 Cornell University

University of Minnesota

Brown University

2020 University of Toronto

2019 University of Calgary

2018 McGill University (McNamara Lecture)

Queen's University (Rosa Bruno Joffre Keynote)

Dre-2018 University of Waterloo, University of Maryland, University of Western Ontario, Carleton University, University of Texas at Arlington, Queen's University (Education, RJSE Keynote), McGill University (2018 Macnamara

Lecture), Cornell University, University of Calgary, Concordia University, Glasgow University, University of Washington, UC Davis, University of Michigan, UC Santa Cruz, University of Oregon, UC San Diego, Simon Frasier University, Brock University, University of Wisconsin at Madison, University of Ottawa, Vanderbilt University, UC Davis, University of Maryland, Stanford University, University of Minnesota, University of Washington, UC Berkeley, UC Santa Cruz, University of Toronto, York University, Kingston General Hospital, UC San Diego, Vanderbilt University, Concordia University, University of Michigan, Chinese Academy of Sciences, Beijing Normal University, University of Toronto

### **Professional Service**

Journals

Editor-in-Chief, Cognitive Development (2014-2019)

Associate Editor, *Developmental Psychology* (2008-2012)

Ad-hoc Reviewing:

PNAS, Developmental Psychology, Child Development, Cortex, Journal of Child Language, Journal of Cognition and Development, Cognitive Development, Cognitive Psychology, Developmental Science, Psychological Science, Journal of Personality and Social Psychology, British Journal of Developmental Psychology, Brain and Language, Journal of Autism and Developmental Disorders, Journal of Cognitive Neuroscience, Neuropsychologia, Social Neuroscience, Trends in Cognitive Sciences, Cognition, Psychiatry Research, Journal of Abnormal Psychology, PLoS One, Infancy, Nature Communications

Societies

Board Member, Cognitive Development Society (2013–2016)

Program Review, SRCD (2005, 2009, 2013)

Program Review, Jean Piaget Society (2007, 2008, 2012)

Invited Symposium, Jean Piaget Society, 2008

**Granting Agencies** 

SSHRC Panel (2011, 2013, 2016)

Ad-hoc:

NSERC (2 per year since 2005)

SSHRC (1 per year since 2005)

CIHR (4)

NSF (USA) (3)

Israeli Science Foundation (1)

Faculty Reviews

Vanderbilt University, Duke University, Cornell University, Western University, University of Toronto, University of Toronto (OISE), UC Davis, UT Dallas, University of Waterloo, Queen's University (Education), APA: Career Achievement Award

# Workshops & Special Issues

Co-editor, New Directions in Child and Adolescent Development (with Charles Kalish) on Selective Social Learning (2007)

Pre-conference organizer, International Conference on Infancy Studies (ICIS) (with Debbie Siegel) on Selective Social Learning (2008)

Workshop Organizer, SSHRC funded workshop on Selective Social Learning (2008)

Co-editor, Special Issue of *Developmental Psychology* (with Melissa Koenig) on Selective Social Learning (2013)

Co-editor, Special Issue of *Cognitive Development* (with Markus Paulus) on Theory of Mind in Infants and Preschoolers (2016).

## **Departmental Service**

Coordinator of Graduate Studies (2021-pres)

#### Chairperson

Developmental Area (2002-2009, 2013-14)

Shortly after my arrival at Queen's, the then-current members of the Developmental Area retired or took jobs elsewhere, thereby leaving me as the only member of the program. I became chair and, together with the Department Head at the time (Merlin Donald) began to rebuild the Developmental Area. In this position I carried out the following duties:

- Chaired 2 to 4 job searches per year as we sought to hire junior and senior faculty to the program.
- Chaired Developmental Area committee as rebuilt our graduate program curriculum, specified course and comprehensive requirements, and developed an intellectual culture.
- Member of departmental executive committee (Priorities and Procedures)
- Member of Graduate Committee
- Development of child participant database

Renewal, Tenure, & Promotion committee (2016-17, 2019-20)

Members of this elected committee review and evaluate faculty members' applications for renewal, tenure and promotion within the department and make recommendations

regarding each file to the department head. This committee meets several times a year, as outlined in the collective agreement. Chairperson responsibilities include developing the review of candidates' files, coordinating external evaluations, and drafting the recommendation letters.

Committees

Renewal, Tenure & Promotion (2010-11)

Merit Committee (2002-4, 2009-12, 2014)

Undergraduate Committee (2001-2, 2009, 2016-20)

Research Ethics Committee (2001-4)

Headship Search Committee (2002, 2016)

## **University Service**

Committees

Peer Research Consultant, Faculty of Arts & Sciences (2013-2021)

Members of this nominated committee provide the university social sciences research community with guidance and assistance in preparing grant applications to federal and provinicial granting agencies. I am a founding member of this committee designed to improve the research culture at Queen's University and encourage participation across a wide range of fields.

Developmental Neuroscience Initiatives (2009-2017)

This interdisciplinary committee met to discuss funding opportunities and curriculum development that coordinates the many resources around Queen's University devoted to understanding basic and applied issues in children's neurocognitive development.

Queen's Entrance Scholarship Adjudication Committee (2005, 2009)

Ontario Graduate Scholarship Adjudication Committee (2004, 2009, 2013)

"Prof Talk" contributor (2007-2019.)

Academic Orientation Committee (2006-7)

## **Courses Taught**

Graduate

Statistics/Design of Experiments

Developmental Proseminar

Developmental Cognitive Neuroscience

Cognitive Development

Undergraduate

Theory of Mind

Developmental Psychology

Developmental Psycholinguistics

Cognitive and Language Development

#### Senior Honours Coordinator

## **Supervision**

Ph.D, Brooke Hilton (current)

Caitlin Atkinson (current)

Mark Payumo (current)

Haykaz Mangardich (2020)

Nicole Bardikoff (2016)

Jeannette Benson (2014)

Sevda Bahtiyar (2013)

Jennie Baxter (2009)

Annette Henderson (2007)

M.Sc. Kayla DiVolpi (current) Julie Olsen (current) Brooke Hilton (2021)

Mark Payumo (2020)

Caitlin Atkinson (2018)

Amanda Rose Yuile (2016)

Vanessa Schell (2016)

Haykaz Mangardich (2016)

Martha Bailey (2014)

Samantha Drover (2014)

Anastasia Christopher (2013)

Christine Lackner (2009)

Sarah Bannoff (2008)

Jeannette Benson (2007)

Beth Seamans (2004)

Undergraduate (Honors Thesis)

Katie Smith, Rachel Wax (current)

Gretha Conrads, Ally Zikic (2020)

Maya Albin, Veronica Johnson (2019)

Taylor Bardell, Cassy Liu (2018)

Breanna McCreary (2017)

Lauren Brandys, Chelsea Dahlgren, Shira Siegel (2016)

Jessica Ho, Meagan Murphy (2015)

Elizabeth McEwen (2014)

Rackeb Tesfaye, Peter Law, Teal Mackintosh (2013)

Alena Mandel, Samantha Drover, Emily Bradshaw (2012)

Laura Aranow, Alisha Kassam, Erin Sloan (2011)

Sydney Hopkins, Victoria Nanowski, Angelita Wong (2010)

Meghna Rajaprakash, Taryn Ridsdale, Joyce Max (2009)
Lindsay Bowman, Carlin Palme (2007)
Alexandra Bailey, Kara Campbell, Jenna Neu (2006)
Nathalie Conn, Rebecca Tay (2005)
Nicole Strang, Dana David (2004)
Andrew Davis, Lisa Ain, Sheila Manji (2003)
Jeff Loucks, Martha Temple, Eva Mamak (2002)
Connie Cheung, Janice Cameron, Sylwia Wdowiak, Neeta Chowdrey (2001)

## **Professional Associations**

Society for Research in Child Development (SRCD) Association for Psychological Science (APS) Cognitive Development Society (CDS) Flux Society Jean Piaget Society (JPS)