John Franchak

Curriculum Vitae

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Employment and Education

2022-	Associate Professor, Dept. of Psychology, University of California, Riverside
2014-2022	Assistant Professor, Dept. of Psychology, University of California, Riverside
2013-2014	Post-Doctoral Fellow, Dept. of Psychological and Brain Sciences, Indiana University (Sponsors: Chen Yu & Linda Smith)
2011-2013	Post-Doctoral Researcher, Dept. of Psychology, New York University (Sponsors: Karen Adolph & David Heeger)
2009-2011	Ph.D., Experimental Psychology, New York University (Advisor: Karen Adolph)
2006-2009	M.A., Experimental Psychology, New York University
2005-2006	Lab Coordinator, Dept. of Psychology, Rutgers University, Newark
2001-2005	B.A., Cognitive Science, University of Virginia

Research Interests

- Perceptual-motor development (posture, locomotion, reaching)
- Wearable sensing of infants' everyday physical activity using machine learning

- Ecological momentary assessment of infants' daily activities via caregiver smartphone surveys and video recordings
- Development of visual attention using mobile eye tracking and screen-based eye tracking
- Motor learning and control (affordances, visual guidance of walking and reaching)

Honors and Awards

2023 Faculty of the Year, Psychology Department, University of California, Riverside
2020 Visiting Scholar, McPherson Eye Research Institute, University of Wisconsin-Madison
2015 Rising Star, Association for Psychological Science
2014 Intel Best Paper Award This hand is my hand: A probabilistic approach to hand disambiguation in egocentric video, IEEE Computer Vision and Pattern Recognition
2013 Postdoctoral Fellowship, NICHD Training Grant, 5T32HD7475-17, Training Program in Integrative Developmental Process, Indiana University
2012 Best Methodological Paper, Understanding the development of motion processing by characterizing optic flow experienced by infants and their mothers, International Conference on Learning and Development
2011 Martin Braine Dissertation Award, New York University
2010 Best Paper Award Head-mounted eye-tracking of infants' natural interactions: A new method, ACM Eye Tracking Research & Applications
2009 Sandra G. Wiener Student Investigator Award, International Society for Developmental Psychobiology

Grant Support

Extramural

2022-2026 James S. McDonnell Foundation Opportunity Award: Characterizing infants' everyday motor and object experiences through computer vision analysis of caregiver-captured video surveys. John Franchak, PI, $250,000 4-year total.
2022-2026 James S. McDonnell Foundation Opportunity Award: Sensorimotor cascades: Integrating real-time movement dynamics during the sleep and awake periods of human infants. Drew Abney, PI, $250,000 4-year-total. John Franchak, consultant.
2023-2024 Center for Smart Use of Technologies to Measure Real World Outcomes (CSTAR) Pilot Project Grant: Wearable technology for measuring everyday experience in infants with cerebral palsy. Kari Kretch, PI, $39,400 2-year total. John Franchak, co-PI

2020-2024	NSF BCS-1941449: Developmental cascades: How motor development alters everyday learning. John Franchak, PI, $754,957 4-year total.
2018-2023	NICHD R01-HD-094830: PLAY (Play and Learning Across a Year). Karen Adolph, PI, $6,341,419 total award. John Franchak, sub-award PI, $18,527 5-year total.
2018-2022	NSF IIS-1763966: CHS: Medium: Collaborative research: Designing virtual worlds for children - A developmental study of how children act, perceive, and reason spatially. Robert Bodenheimer, PI, $539,504 total award. John Franchak, consultant, $24,000 4-year total.
2018-2021	NSF BCS-1749594: Picture book reading: Investigating a key source of linguistic input for early language development. Jessica Montag, PI, $427,933 3-year total. John Franchak, consultant, $5000 3-year total.
2018-2023	NICHD R01-HD-033486: Flexibility of learning in infant skill acquisition, Karen Adolph, PI, total award $3,086,397. John Franchak, consultant, $25,000 5-year total.

Intramural

2022-2023	UCR Center for Health Disparities Research FIRST Pilot Grant: Sociocultural and emotion regulation processes that contextualize health disparities in Latinx children's anxiety. Elizabeth Davis, PI, $50,000 total award. John Franchak, co-PI.
2021-2022	UCR Exploration Center for Innovative Teaching & Engagement: Remote Course Conversion Grant. John Franchak, PI, $8,000 1-year total.
2021-2022	UCR Center for Health Disparities Research Interdisciplinary Research Working Group Award: Contextualizing Latinx children's developing psychopathology: An interdisciplinary investigation of sociocultural and psychological processes contributing to health disparities in anxiety. Elizabeth Davis, PI $2,500 1-year total. John Franchak, co-PI.
2019-2021	UCR Regents Faculty Development Fellowship: Characterizing everyday opportunities for learning in the second year of life. John Franchak, PI, $5,000 2-year total.
2015-2017	UCR Regents Faculty Fellowship: Developmental changes in visual experiences over the first year of life. John Franchak, PI, $6,000 2-year total.

Publications

Manuscripts Invited/Under Review/In Revision

Franchak, J.M., Hospodar, C., Adolph, K.E. (under review). Risky actions: Why and how to estimate variability in motor performance.

Luo, C., & Franchak, J.M. (under review). Learning to efficiently gather visual information using the eyes, head, and body.

Peer-Reviewed Publications

1. Franchak, J.M., Smith, L.B., & Yu, C. (2024). Developmental changes in how head orientation structures infants' visual attention. Developmental Psychobiology, 66(7), e22538.

2. Franchak, J.M., Tang, M., Rousey, H., & Luo, C. (2024). Long-form recording of infant body position in the home using wearable inertial sensors. Behavior Research Methods, 56, 4982-5001.

3. Franchak, J.M. & Adolph, K.E. (in press). An update of the development of motor behavior. WIREs Cognitive Science.

4. Fu, X., Franchak, J.M., MacNeill, L., Gunther, K.E., Borjon, J.I., Yurkovic-Harding, J., Harding, S., Bradshaw, J., Pérez-Edgar, K.E. (in press). Implementing mobile eye tracking in psychological research: A practical guide. Behavior Research Methods.

5. Franchak, J.M., Kadooka, K., & Fausey, C.M. (2024). Longitudinal relations between independent walking, body position, and object experiences in home life. Developmental Psychology, 60(2), 228-242.

6. Hospodar, C., Franchak, J.M., & Adolph, K.E. (2023). Performance variability and affordance perception: Practice effects on perceptual judgments for walking versus throwing. Experimental Brain Research, 241, 2045–2056.

7. Jing, M., Kadooka, K., Franchak, J.M., & Kirkorian, K. (2023). The effect of comprehensibility and visual salience on children's and adults' gaze while watching video. Journal of Experimental Child Psychology, 226, 105562.

8. Luo, C., & Franchak, J.M. (2022). Eye-head-body coordination in the motor-memory trade-off. Collabra: Psychology, 8(1), 38821.

9. Choi, K., Schlesinger, M.A., Franchak, J.M., & Richert, R.A. (2022). Preschoolers' attention to and learning from on-screen characters that vary by effort and efficiency: An eye-tracking study Frontiers in Psychology, 13:1011172.

10. Franchak, J.M., & Kadooka, K. (2022). Age differences in orienting to faces in dynamic scenes depend on face centering, not visual saliency. Infancy, 27(6), 1032-1051.

11. Franchak, J.M., Scott, V., & Luo, C. (2021). A contactless method for measuring full-day, naturalistic motor behavior using wearable inertial sensors. Frontiers in Psychology, 12, 701343.

12. Franchak, J.M., McGee, B., & Blanch, G. (2021). Adapting the coordination of eyes and head to differences in task and environment during fully-mobile visual exploration. PLOS ONE, 16(8), e0256463.

13. Feghhi, I., Franchak, J.M., & Rosenbaum. D. (2021). Towards a common code for difficulty: Navigating a narrow gap is like memorizing an extra digit. Attention, Perception, & Psychophysics, 83, 3275–3284.

14. Gagnon, H.C., Rohovit, T., Finney, H., Zhao, Y., Franchak, J.M., Stefanucci, J.K., Creem- Regehr, S.H., & Bodenheimer, R.E. (2021). The effect of feedback on estimates of reaching ability in virtual reality. Proceedings of the 2021 IEEE Virtual Reality (VR).

15. Luo, C., & Franchak, J.M. (2020). Head and body structure infants' visual experiences during mobile, naturalistic play. PLOS ONE, 15, e0242009.

16. Kadooka, K., & Franchak, J.M. (2020). Developmental changes in infants' and children's attention to faces and salient regions vary across and within video stimuli. Developmental Psychology, 56, 2065-2079.

17. Franchak, J.M. (2020). Calibration of perception fails to transfer between functionally similar affordances. Quarterly Journal of Experimental Psychology, 73, 1311-1325.

18. Franchak, J.M. (2020). The ecology of infants' perceptual-motor exploration. Current Opinion in Psychology, 32, 110-114.

19. Franchak, J.M. (2019). Development of affordance perception and recalibration in children and adults. Journal of Experimental Child Psychology, 183, 100-114.

20. Franchak, J.M. (2019). Changing opportunities for learning in everyday life: Infant body position over the first year. Infancy, 24, 187-209.

21. Labinger, E., Monson, J.R., & Franchak, J.M. (2018). Effectiveness of spontaneous exploration when recalibrating to changing affordances. PLOS ONE, 13, e0209298.

22. Franchak, J.M. & Somoano, F.A. (2018). Rate of recalibration to changing affordances for squeezing through doorways reveals the role of feedback. Experimental Brain Research, 236, 1699-1711.

23. Franchak, J.M., Kretch, K. S., & Adolph, K. E. (2018). See and be seen: Infant-caregiver social looking during locomotor free play. Developmental Science, 21, e12626.

24. Slone, L.K., Abney, D.H., Borjon, J.I., Chen, C., Franchak, J.M., Pearcy, D., Suarez-Rivera, C., Xu, T.L., Zhang, Y., Smith, L.B., & Yu, C. (2018). Gaze in action: Head-mounted eye tracking of children's dynamic visual attention during naturalistic behavior. Journal of Visualized Experiments, 141, e58496.

25. Franchak, J.M. (2017). Exploratory behaviors and recalibration: What processes are shared between functionally-similar affordances? Attention, Perception, & Psychophysics, 79, 1816-1829.

26. Adolph, K.E. & Franchak, J.M. (2017). The development of motor behavior. WIREs Cognitive Science, 8, e1430.

27. Franchak, J.M., Heeger, D.J., Hasson, U. & Adolph, K.E. (2016). Free viewing gaze behavior in infants and adults. Infancy, 21, 262-287.

28. Franchak, J.M. & Yu, C. (2015). Visual-motor coordination in natural reaching of young children and adults. Proceedings of the 37th Annual Meeting of the Cognitive Science Society.

29. Nayer, K., Franchak, J.M., Adolph, K.E., & Kiorpes, L. (2015). From local to global processing: The development of illusory contour perception. Journal of Experimental Child Psychology, 131, 38-55.

30. Franchak, J.M. & Adolph, K.E. (2014). Gut estimates: Pregnant women adapt to possibilities for squeezing through doorways. Attention, Perception, & Psychophysics, 76, 460-472.

31. Franchak, J.M. & Adolph, K.E. (2014). Affordances for action as probabilistic functions: Implications for development, perception, and decision-making. Ecological Psychology, 26, 109-124.

32. Kretch, K.S., Franchak, J.M. & Adolph, K.E. (2014). Crawling and walking infants see the world differently. Child Development, 85, 1503-1518.

33. Bambach, S., Franchak, J.M., Crandall, D.J., & Yu, C. (2014). Detecting hands in children's egocentric views to understand embodied attention during social interaction. Proceedings of the 36th Annual Meeting of the Cognitive Science Society.

34. Lee, S., Bambach, S., Crandall, D.J., Franchak, J.M., & Yu, C. (2014). This hand is your hand: A probabilistic approach to hand disambiguation in egocentric video. Proceedings of the 2014 IEEE Conference on Computer Vision and Pattern Recognition.

35. Ishak, S., Franchak, J.M., & Adolph, K.E. (2014). Perception-action development from infants to adults: Perceiving affordances for reaching through openings. Journal of Experimental Child Psychology, 117, 92-105.

36. Comalli, D.M., Franchak, J.M., Char, A., & Adolph, K.E. (2013). Ledge and wedge: Older and younger adults' perception of possibilities for action. Experimental Brain Research, 228, 183-192.

37. Franchak, J.M. & Adolph, K.E. (2012). What infants know and what they do: Perceiving possibilities for walking through openings. Developmental Psychology, 48, 1254-1261.

38. Franchak, J.M., Celano, E.C., & Adolph, K.E. (2012). Perception of passage through openings depends on the size of the body in motion. Experimental Brain Research, 223, 301-310.

39. Raudies, F., Gilmore, R.O., Kretch, K.S., Franchak, J.M., & Adolph, K.E. (2012). Understanding the development of motion processing by characterizing optic flow experienced by infants and their mothers. Proceedings of the IEEE International Conference on Development and Learning.

40. Franchak, J.M., Kretch, K.S., Soska, K.C., & Adolph, K.E. (2011). Head-mounted eye-tracking: A new method to describe infant looking. Child Development, 82, 1738-1750.

41. Franchak, J.M., van der Zalm, D.J., & Adolph, K.E. (2010). Learning by doing: Action performance facilitates affordance perception. Vision Research, 50, 2758-2765.

42. Franchak, J.M., & Adolph, K.E. (2010). Visually guided locomotion: Head-mounted eye-tracking of natural locomotion in children and adults. Vision Research, 50, 2766-2774.

43. Franchak, J.M., Kretch, K.S., Soska, K.C., Babcock, J.S., & Adolph, K.E. (2010). Head-mounted eye-tracking of infants' natural interactions: A new method. Proceedings of the 2010 Symposium on Eye Tracking Research & Applications.

Book Chapters

1. Franchak, J.M. & Kretch, K.K. (in press). Visual exploration and visual guidance of locomotion. Oxford Handbook of Perceptual Development

2. Franchak, J.M., & Yu, C. (2022). Beyond screen time: Using head-mounted eye tracking to study natural behavior. Advances in Child Development and Behavior, (Vol 62., pp. 61-92). Cambridge, MA: Academic Press.

3. Franchak, J.M. (2020). Visual exploratory behavior and its development. The Psychology of Learning and Motivation: Gazing toward the future: Advances in Eye movement Theory and Applications, (Vol 73, pp. 59-94).

4. Franchak, J.M. (2020). Looking with the eyes and head. Perception as Information Detection: Reflections on Gibson's Ecological Approach to Visual Perception, (pp. 205-221). New York: Routledge.

5. Franchak, J.M. (2017). Using head-mounted eye tracking to study development. Cambridge Encyclopedia of Child Development, 2nd edition.

6. Adolph, K.E., Joh, A.S., Franchak, J.M., Ishak, S., & Gill, S.V. (2008). Flexibility in the development of action. Oxford Handbook of Human Action, New York: Oxford University Press.

Open Science

Shared Datasets

(2024) Risky actions: Why and how to estimate variability in motor performance OSF. `doi:10.17605/OSF.IO/WNCBK`

(2024) Learning to efficiently gather visual information using the eyes, head, and body NA. `doi:10.17605/OSF.IO/WDX73`

(2023) Infant body position classification (data and reproducible manuscript). Zenodo. `doi:10.5281/zenodo.8310338`

(2023) Infant body position classification (example of machine learning pipeline). Zenodo. `doi:10.5281/zenodo.8312007`

(2023) Longitudinal relations between independent walking, body position, and object experiences in home life (data and reproducible manuscript). OSF. `doi:10.17605/OSF.IO/YPD95`

(2022) Machine learning classification of infant body position. OSF. `doi:10.17605/OSF.IO/WCGA9`

(2022) Eye-head-body coordination affects the motor-memory trade-off. OSF. `doi:10.17605/OSF.IO/X8QAC`

(2021) Adapting the coordination of eyes and head to differences in task and environment during fully-mobile visual exploration. CodeOcean. `doi:10.24433/CO.8767371.v2`

(2020) Head and body structure infants' visual experiences during mobile, naturalistic play. Databrary. `doi:10.17910/b7.1216`

(2019) Transfer of calibration between squeezing and fitting affordances. OSF. doi:10.17605/OSF.IO/ZBN9E

(2018) Spontaneous exploration in affordance recalibration. OSF. doi:10.17605/OSF.IO/EUGPN

(2015) Free viewing gaze behavior in infants and adults. Databrary. doi:10.17910/B7.192

(2015) 12-month-olds and their caregivers wearing head-mounted eye trackers during spontaneous free play in lab playroom. Databrary. doi:10.17910/B7.135

(2015) Understanding the development of motion processing by characterizing optic flow experienced by infants and their mothers. Databrary. doi:10.17910/B7.116

(2015) Head-mounted eye tracking: A new method to describe infant looking. Databrary. doi:10.17910/B7.124

(2015) What infants know and what they do: Perceiving possibilities for walking through openings. Databrary. doi:10.17910/B7.136

(2013) Crawling and walking infants see the world differently. Databrary. doi:10.17910/B7RP4H

(2013) Younger and older adults' perception of action possibilities. Databrary. doi:10.17910/B7H592

Open Source Research and Teaching Materials

- Eye Tracking Accuracy Calculator, https://github.com/JohnFranchak/et_accuracy
- Dynamic ROI Coder for Matlab, https://github.com/JohnFranchak/roi_coder
- Principles of Data Science Course, https://github.com/psych-259-data-science-2022
- ICIS Head-Mounted Eye Tracking Workshop, https://github.com/ICIS-HMET-Workshop
- Matlab Utilities for Eye Tracking, https://github.com/JohnFranchak/et_tools
- Escalator Psychophysical Toolbox, https://github.com/JohnFranchak/escalator_toolbox

Presentations

Conference Organizing

1. Tamis-Lemonda, C., Franchak, J.M., & Ossmy, O. (2024, July). Infancy in context: Emerging approaches and technologies. Symposium Organizer and Chair, International Congress on Infant Studies, Glasgow, Scotland.

2. Franchak, J.M., Wass, S., Rocha, S., & Nguyen, Q.T. (2024, July). Measuring complex infant behaviours using machine learning and computer vision. Organizer, Preconference Workshop for the International Congress on Infant Studies, Glasgow, Scotland.

3. Yu, C., Franchak, J.M., & Castellanos, I. (2022, July). Tutorial on using head-mounted eye tracking in infant research. Co-organizer, Preconference Workshop for the International Congress on Infant Studies, Ottawa, Canada.

4. Yu, C., Franchak, J.M., & Castellanos, I. (2020, July). Tutorial on using head-mounted eye tracking in infant research. Co-organizer, Preconference Workshop for the International Conference on Infant Studies, Glasgow, Scotland (Cancelled).

5. Yu, C., Franchak, J.M., & Castellanos, I. (2018, June). Tutorial on using head-mounted eye tracking in infant research. Co-organizer, Preconference Workshop for the International Conference on Infant Studies, Philadelphia, PA.

6. Franchak, J.M. (2014, July). What head-mounted eye tracking reveals about infants' active vision. Symposium Organizer and Chair, International Conference on Infant Studies, Berlin, Germany.

Conference Papers

1. Franchak, J.M., Rousey, H., Tang, M., & Garcia, S. (2024, July). Full-day wearable sensor measurements reveal age-related increases in infant positional variability. Paper presented at the International Congress on Infant Studies, Glasgow, Scotland.

2. Franchak, J.M. (2024, July). From instants to experiences: How ecological momentary assessment can characterize infants' everyday activity. Paper presented at the International Congress on Infant Studies, Glasgow, Scotland.

3. Franchak, J.M. (2024, July). Classifying movement categories from continuously-recording wearable sensors. Paper presented at the Preconference workshop on measuring complex infant behaviours using machine learning and computer vision, International Congress on Infant Studies, Glasgow, Scotland.

4. Hospodar, C.M., Franchak, J.M., & Adolph, K.E. (2023, June). Performance and perception In walking versus throwing: Variability, accuracy, and practice effects. Paper presented at the North American Society for the Psychology of Sport and Physical Activity.

5. Franchak, J.M., Kadooka, K. , & Fausey, C. (2022, July). Longitudinal effects of independent walking on postural and object experiences in home life. Paper presented at the meeting of the International Congress on Infant Studies, Ottawa, Canada.

6. Franchak, J.M. (2022, July). Head-mounted eye tracking data collection and coding. Paper presented at the Preconference Tutorial on Using Head-Mounted Eye Tracking in Infant Research, International Congress on Infant Studies, Ottawa, Canada.

7. Kadooka, K. , Caufield, M., Fausey, C., & Franchak, J.M. (2021, April). Visuomotor learning opportunities are nested within infants' everyday activities. Paper presented at the meeting of the Society for Research in Child Development. [Virtual].

8. Franchak, J.M. (2021, April). Measuring infants' naturalistic motor behavior with wearable inertial sensors and machine-learning classification. Paper presented at the meeting of the Society for Research in Child Development. [Virtual].

9. Gagnon, H.C., Rohovit, T., Finney, H., Zhao, Y., Franchak, J.M., Stefanucci, J.K., Creem-Regehr, S.H., & Bodenheimer, R.E. (2021, March). The effect of feedback on estimates of reaching ability in virtual reality. Paper presented at the 2021 IEEE Virtual Reality meeting. [Virtual].

10. Franchak, J.M. (2020, July). Head-mounted eye tracking data collection and coding. Paper presented at the Preconference Tutorial on Using Head-Mounted Eye Tracking in Infant Research, International Conference on Infant Studies, Glasgow, Scotland (Cancelled).

11. Lozano-Ziebart, S., Wagman, J.B., Franchak, J.M. & Farmer-Dougan, V. (2019, October). Dogs in the gray zone: Canine perception for going over or under a barrier. Paper presented at the International Canine Sciences Conference, Phoenix, AZ.

12. Franchak, J.M. (2018, June). Head-mounted eye tracking data collection and coding. Paper presented at the Preconference Tutorial on Using Head-Mounted Eye Tracking in Infant Research, International Congress on Infant Studies, Philadelphia, PA.

13. Kadooka, K., & Franchak, J.M. (2017, October). Eye movement patterns while viewing screen-based media: Age-related changes from infancy to adulthood. Paper presented at the Cognitive Development Society meeting on Digital Media and Cognitive Development, Portland, OR.

14. Choi, K. , Schlesinger, M.A. , Richert, R.A., & Franchak, J.M. (2017, May). Character perceptions guide children's looking to and learning from on-screen characters. Paper presented at the International Communication Association Annual Conference, San Diego, CA.

15. Richert, R., Schlesinger, M. , & Franchak, J.M. (2016, October). Children attend to and learn more from characters who try hard. Paper presented at the SRCD Special Topic Meeting in Technology and Media in Children's Development, Irvine, CA.

16. Franchak, J.M., & Yu, C. (2015, July). Visual-motor coordination in natural reaching of young children and adults. Paper presented at the meeting of the Cognitive Science Society, Pasadena, CA.

17. Franchak, J.M., & Adolph, K.E. (2015, July). Action experience facilitates recalibration to changing affordances when squeezing through doorways. Paper presented at the International Conference on Perception and Action, Minnesota, MN.

18. Franchak, J.M., & Yu, C. (2014, July). Infant's coordination of the eyes, hands, and head while guiding reaching movements. Paper presented at the International Conference on Infant Studies, Berlin, Germany.

19. Franchak, J.M., Kretch, K.S., Heeger, D.H., Hasson, U., & Adolph, K.E. (2014, July). Infants' visual exploration of faces in screen-based and real-world tasks. Paper presented at the International Conference on Infant Studies, Berlin, Germany.

20. Franchak, J.M. (2014, July). Measuring infants' visual exploration with head-mounted eye tracking. Paper presented at the Preconference Workshop on Head-Mounted Eye Tracking, International Congress on Infant Studies, Berlin, Germany.

21. Bambach, S., Franchak, J.M., Crandall, D.J., & Yu, C. (2014, July). Detecting hands in children's egocentric views to understand embodied attention during social interaction. Paper presented at the 36th annual meeting of the Cognitive Science Society, Quebec City, Canada.

22. Adolph, K.E., Kretch, K.S., Cole, W.G., Karasik, L., Franchak, J.M., Chan, G., Tamis-LeMonda, C. (2013, April). Effects of crawling and walking on infants' experiences. Paper presented at the meeting of the Society for Research in Child Development, Seattle, WA.

23. Adolph, K.E., & Franchak, J.M. (2012, June). Navigating through tight spots: Learning and recalibration. Paper presented at the International Conference on Infant Studies, Minneapolis, MN.

24. Adolph, K.E., Franchak, J.M., Kretch, K.S., & Soska, K.C. (2011, April). Head-mounted eye-tracking: A novel method to describe active vision in natural environments. Paper presented at the meeting of the Society for Research in Child Development, Montreal, Canada.

25. Franchak, J.M., Kretch, K.S., Soska, K.C., & Adolph, K.E. (2010, March). Visual exploration during natural interactions: Head-mounted eye-tracking with mobile infants. Paper presented at the International Conference on Infant Studies, Baltimore, MD.

26. Franchak, J.M., Kretch, K.S., Soska, K.C., & Adolph, K.E. (2009, October). Head-mounted eye-tracking of infants during natural interactions. Paper presented at the International Society for Developmental Psychobiology, Sandra G. Wiener Awards Symposium, Chicago, IL.

27. Franchak, J.M., van der Zalm, D.J. , Hartzler, B.M. , Adolph, K.E. (2009, June). Perceiving affordances for navigating through openings. Paper presented at the 15th International Conference on Perception and Action, Minneapolis, MN.

28. Franchak, J.M., Adolph, K.E., Gabelman, L. , & Babcock, J.S. (2009, April). Visual guidance of locomotion in children: Navigation from the periphery. Paper presented at the meeting of the Society for Research in Child Development, Denver, CO.

29. Franchak, J.M., Adolph, K.E., Badaly, D., & Babcock, J.S. (2008, November). Navigation from the corner of the eye: Visual guidance of locomotion in children. Paper presented at the meeting of the International Society for Developmental Psychobiology, Washington, DC.

30. Franchak, J.M., Smith, M.T. , & Adolph, K.E. (2007, November). Pregnant women walking through doorways. Paper presented at the meeting of the International Society for Developmental Psychobiology, San Diego, CA.

31. Franchak, J.M., & Adolph, K.E. (2007, May). Perceiving changing affordances for action: Pregnant women walking through doorways. Paper presented at the meeting of the Vision Sciences Society, Sarasota, FL.

Conference Posters

1. Kretch, K.S., Enriques, F., Franchak, J.M. (2024, August). Body position classification using wearable sensors in infants with cerebral palsy. Poster presented at the Center for Smart Use of Technologies to Assess Real World Outcomes (C-STAR).

2. Franchak, J.M., Ford, J., Luna, A., & Fausey, C.M. (2024, July). Longitudinal changes in infants' daily routines moderate object holding. Poster presented at the International Congress on Infant Studies, Glasgow, Scotland.

3. Kuznia, A., Miko, J., McComb, K., Fausey, C.M., & Franchak, J.M. (2024, March). The everyday objects that younger and older USA infants hold. Poster presented at the meeting of the Cognitive Development Society, Pasadena, CA.

4. Guo, Y., Tang, M., & Franchak, J.M. (2024, March). Characterizing infant object experience through repeated video sampling across the day. Poster presented at the meeting of the Cognitive Development Society, Pasadena, CA.

5. Rousey, H., Tang, M., Garcia, S., & Franchak, J.M. (2024, March). Exploring the relation between infant body position and adult language input across the day. Poster presented at the meeting of the Cognitive Development Society, Pasadena, CA.

6. Luna, A., Kretch, K.S., & Franchak, J.M. (2024, March). Predictors of skill expression in infants' everyday behavior. Poster presented at the meeting of the Cognitive Development Society, Pasadena, CA.

7. Tang, M., Rousey, H., Garcia, S., & Franchak, J.M. (2024, March). Does infant vocalization increase when sitting in daily life?. Poster presented at the meeting of the Cognitive Development Society, Pasadena, CA.

8. Tang, M., Rousey, H., Luo, C., & Franchak, J.M. (2023, April). Predicting infant body position in naturalistic environments using inertial sensors. Poster presented at the meeting of the Western Psychological Association.

9. Guo, Y., Tang, M., & Franchak, J.M. (2023, April). Feasibility of video ecological momentary assessment for measuring infant behavior. Poster presented at the meeting of the Western Psychological Association.

10. Ford, J., Luna, A., Kadooka, K., Fausey, C., & Franchak, J.M. (2023, April). Discovering individual differences in infant activity through ecological momentary assessment. Poster presented at the meeting of the Western Psychological Association.

11. Rousey, H., Tang, M., Luo, C., & Franchak, J.M. (2023, April). Examining the relation between language input and infant body position across the entire day. Poster presented at the meeting of the Western Psychological Association.

12. Jing, M., Kadooka, K., Franchak, J.M., & Kirkorian, H. (2020, October). The effect of comprehensibility on saliency-based gaze prediction for children and adults watching video. Poster presented at the meeting of the International Society for Developmental Psychobiology. [Virtual].

13. Blanch, G., McGee, B., & Franchak, J.M. (2020, October). Task demands influence eye-head coordination. Poster presented at the meeting of the Western Psychological Association [Virtual].

14. Franchak, J.M., & Kadooka, K. (2020, July). Television experience predicts infants' sensitivity to different face-looking cues when viewing videos. Poster presented at the International Congress on Infant Studies [Virtual].

15. Kadooka, K., McGee, B., Truong, T., Luo, C., & Franchak, J.M. (2020, July). The influence of centering and saliency on infants' real-world visual attention. Poster presented at the International Congress on Infant Studies [Virtual].

16. McGee, B., Michaels, K., & Franchak, J.M. (2020, July). Associative learning modulates infants' attentional selection in a free-viewing task. Poster presented at the International Congress on Infant Studies [Virtual].

17. Franchak, J.M. & Kadooka, K. (2019, October). Visual saliency guides orienting to dynamic faces in infants, children, and adults. Poster presented at the Biennial meeting of the Cognitive Development Society, Louisville, KY.

18. Kadooka, K., & Franchak, J.M. (2019, October). Developmental differences in attention to action-specific information. Poster presented at the Biennial meeting of the Cognitive Development Society, Louisville, KY.

19. Jing, M., Kadooka, K., Franchak, J.M., & Kirkorian, H. (2019, October). The effect of comprehensibility on saliency-based gaze prediction for children and adults watching Sesame Street. Poster presented at the Biennial meeting of the Cognitive Development Society, Louisville, KY.

20. Lozano-Ziebart, S., Wagman, J.B., Franchak, J.M. & Farmer-Dougan, V. (2019, August). Dogs in the gray zone: Canine perception for going over or under a barrier. Poster presented at the American Psychological Association Convention, Chicago, IL.

21. Luo, C., & Franchak, J.M. (2019, March). Looking compensates for postural constraints: Infants center gaze targets in view when looking. Poster presented at the Biennial meeting of the Society for Research in Child Development, Baltimore, MD.

22. Gauvain, M.T., Harmon, D., Cheong, Y., & Franchak, J.M. (2019, February). An eye tracking study of children's use of plans to construct objects alone and with mother. Poster presented at the International Convention of Psychological Science, Paris, France.

23. Luo, C., & Franchak, J.M. (2018, October). Spatial structure of mobile infants' visual experiences in natural interaction with caregivers and objects. Poster presented at the meeting of the International Society for Developmental Psychobiology, San Diego, CA.

24. Franchak, J.M. (2018, October). Developing motor abilities alter infants' everyday experiences. Poster presented at the meeting of the International Society for Developmental Psychobiology, San Diego, CA.

25. Kadooka, K., & Franchak, J.M. (2018, July). Variation in the influence of bottom-up and top-down features on adult-like gaze. Poster presented at the International Congress on Infant Studies, Philadelphia, PA.

26. Labinger, E., Monson, J.R., & Franchak, J.M. (2018, April). Do adults practice effectively when recalibrating to altered motor abilities?. Poster presented at the meeting of the Western Psychological Association, Portland, OR.

27. Kadooka, K., & Franchak, J.M. (2017, October). Development of adult-like gaze behavior in infants and children when viewing video media. Poster presented at the 11th Biennial Meeting of the Cognitive Development Society, Portland, OR.

28. Choi, K., Schlesinger, M.A., Grant, C., Puttre, H.J., Richert, R.A., & Franchak, J.M. (2017, October). Preschoolers use other's effort as a cue to attention and selective attention. Poster presented at the 11th Biennial Meeting of the Cognitive Development Society, Portland, OR.

29. Schlesinger, M.A., Richert, R.A., & Franchak, J.M. (2016, August). Informant effort expenditure impacts young children's learning, eye gaze, and trust. Poster presented at the 38th Annual Meeting of the Cognitive Science Society, Philadelphia, PA.

30. Franchak, J.M., & Yu, C. (2016, May). Infants structure their visual experiences to favor toys over faces during play. Poster presented at the International Congress on Infant Studies, New Orleans, LA.

31. Franchak, J.M., Heeger, D.H., Hasson, U., & Adolph, K.E. (2013, April). Free-viewing gaze behavior in infants and adults. Poster presented at the meeting of the Society for Research in Child Development, Seattle, WA.

32. Kretch, K.S., Franchak, J.M., Brothers, J.L., & Adolph, K.E. (2012, June). Effects of locomotor posture on infants' visual experiences. Poster presented at the International Conference on Infant Studies, Minneapolis MN.

33. Gilmore, R.O., Raudies, F., Kretch, K.S., Franchak, J.M. & Adolph, K.E. (2012, June). Do you see what I see? Comparing optic flow experienced by infants and their mothers. Poster presented at the International Conference on Infant Studies, Minneapolis MN.

34. Franchak, J.M., Hasson, U., Heeger, D.J., & Adolph, K.E. (2012, May). Reliability of actors' and observers' gaze during natural tasks. Poster presented at the meeting of the Vision Sciences Society, Naples FL.

35. Kretch, K.S., Franchak, J.M., Brothers, J.L., & Adolph, K.E. (2012, May). What infants see depends on locomotor posture. Poster presented at the meeting of the Vision Sciences Society, Naples FL.

36. Raudies, F., Kretch, K.S., Franchak, J.M., Mingolla, E., Gilmore, R.O., & Adolph, K.E. (2012, May). Where do mothers point their head when they walk and where do babies point their head when they are carried?. Poster presented at the meeting of the Vision Sciences Society, Naples FL.

37. Gilmore, R.O., Raudies, F., Kretch, K.S., Franchak, J.M., & Adolph, K.E. (2012, May). Patterns of optic flow experienced by infants and their mothers during locomotion. Poster presented at the meeting of the Vision Sciences Society, Naples FL.

38. Franchak, J.M., Sadanand, A., & Adolph, K.E. (2011, October). Entrapment or falling: Infants' exploration of action possibilities. Poster presented at the meeting of the Cognitive Development Society, Philadelphia, PA.

39. Franchak, J.M., Sadanand, A., & Adolph, K.E. (2011, April). Walls and falls: Infants' motor decisions reflect consequences for errors. Poster presented at the meeting of the Society for Research in Child Development, Montreal, Canada.

40. Franchak, J.M., & Adolph, K.E. (2010, November). Tight squeeze: Infants' motor decisions reflect consequences for errors. Poster presented at the meeting of the International Society for Developmental Psychobiology, San Diego, CA.

41. Gabelman, L., Franchak, J.M., & Adolph, K.E. (2010, March). Fovea to periphery: The developmental progression of visual guidance during obstacle navigation. Poster presented at the International Conference on Infant Studies, Baltimore, MD.

42. Franchak, J.M., Adolph, K.E., Badaly, D., Smith, M.T., & Babcock, J.S. (2008, May). Head-mounted eye-tracking with children: Visual guidance of motor action. Poster presented at the meeting of the Vision Sciences Society, Naples, FL.

43. Franchak, J.M., Smith, M.T., & Adolph, K.E. (2008, May). Visual guidance of locomotion in infants, young adults, and the elderly. Poster presented at the meeting of the Vision Sciences Society, Naples, FL.

44. Franchak, J.M., Stefanucci, J.K., & Proffitt, D.R. (2006, May). Within striking distance: Task efficacy influences perceived size and distance. Poster presented at the meeting of the Vision Sciences Society, Sarasota, FL.

45. Franchak, J.M., & Shiffrar, M. (2006, May). Body form and position influence the perceived speed of human gait. Poster presented at the meeting of the Vision Sciences Society, Sarasota, FL.

Invited Talks and Colloquia

1. Invited Program, IEEE International Conference on Learning and Development, Austin, TX. (2024)

2. Department of Psychology, Univ. of California, Merced, Merced, CA. (2024)

3. Invited Speaker, James S. McDonnell Foundation Opportunity Awardees Meeting, Wellesley, MA. (2023)

4. Department of Psychology, Univ. of Wisconsin, Madison, Madison, WI. (2022)

5. Department of Human Development and Family Studies, Univ. of Wisconsin, Madison, Madison, WI. (2022)

6. Department of Psychology, Univ. of California, San Diego, San Diego, CA. (2022)

7. Invited Program, Understanding Vision Virtual Conference. (2022)

8. Institute of Human Development, Univ. of California, Berkeley, Berkeley, CA. (2019)

9. Center for Cognition, Action, & Perception, Univ. of Cincinnati, Cincinnati, OH. (2018)
10. Department of Psychology, Univ. of California, Los Angeles, Los Angeles, CA. (2018)
11. Department of Psychology, Univ. of Nevada, Las Vegas, Las Vegas, NV. (2016)
12. Department of Psychology, California State Univ., Long Beach, Long Beach, CA. (2016)
13. Center for Mind and Brain, Univ. of California, Davis, Davis, CA. (2015)
14. Department of Psychology, Univ. of Oregon, Eugene, OR. (2015)
15. Department of Cognitive Science, Univ. of California-San Diego, San Diego, CA. (2014)
16. Department of Psychology, Tufts Univ., Medford, MA. (2014)
17. Department of Psychology, Univ. of California-Riverside, Riverside, CA. (2014)
18. Invited Speaker, Workshop on Eye Tracking Methods and Analysis, Center for Interdisciplinary Study, Bielefeld Univ., Bielefeld, Germany. (2014)
19. Department of Psychology, Bard Univ., Annandale-on-Hudson, NY. (2012)
20. Department of Psychology, Rutgers Univ., Newark, Newark, NJ. (2012)
21. Department of Psychology, Stony Brook Univ., Stony Brook, NY. (2012)
22. Department of Psychology, Univ. of Connecticut, Storrs, CT. (2011)
23. Department of Psychology, Princeton Univ., Princeton, NJ. (2011)
24. Invited Speaker, Workshop for Perception and Action, Rauischholzhausen Castle, Germany. (2010)

Media Coverage

La Presse. (2018) Les mystères des positions de bébés
Science Daily. (2018) Study explores infant body position and learning
Simon's Foundation. (2011) Eye-tracking device travels with toddlers
Voices of America, Science/Health News. (2010) New studies reveal infants' world of vision
New York Times. (2010) Looking this way and that, and learning to adapt to the world

Professional Activities and Service

Reviewer Positions

2025	Panel Reviewer, Society for Research in Child Development
2024	Member, National Eye Institute Grant Review Panel
2024	Area Chair, IEEE International Conference on Learning and Development

2024	Panel Reviewer, International Congress on Infant Studies
2024	Panel Reviewer, Cognitive Development Society
2022-	Associate Editor, Developmental Psychology
2022	Member, National Science Foundation Review Panel
2021	Member, National Science Foundation Review Panel
2020-2023	Review Editor, Perception Science Editorial Board, Frontiers in Psychology and Frontiers in Neuroscience
2022	Panel Reviewer, International Congress on Infant Studies
2020	Panel Reviewer, Society for Research in Child Development
2020	Scientific Committee, International Conference on Perception and Action (conference cancelled)
2020	Panel Reviewer, SRCD Special Topics Meeting on Learning Through Play and Imagination
2020	Panel Reviewer, International Congress on Infant Studies
2019	Panel Reviewer, Cognitive Development Society
2018	Panel Reviewer, International Congress on Infant Studies
2017	Panel Reviewer, Society for Research in Child Development
2016	Panel Co-Chair, International Congress on Infant Studies
2016	Panel Reviewer, SRCD Special Topics Meeting on Technology and Media in Children's Development
2015	Scientific Committee, International Conference on Perception and Action

Ad Hoc Reviewer

Behavioral Research Methods
Cambridge University Press
Canadian J. of Experimental Psych.
Child Development
Child Development Perspectives
Cognition
Cognitive Science
Current Directions in Psychology
Developmental Psychology
Developmental Science
Journal of Cognition and Development
Journal of Experimental Child Psychology
Journal of Motor Behavior
Journal of Motor Learning and Development
Journal of Nonverbal Behavior
Journal of Vision
Journal of Visualized Experiments
Language Learning
National Science Center of Poland
National Science Foundation

Ecological Psychology
Experimental Brain Research
Experimental Psychology
Frontiers in Psychology
Heliyon
IEEE Virtual Reality
IEEE Visualization and Computer Graphics
Infancy
Infant Behavior and Development
JEP: General
JEP: Human Perception Performance
JMIR mHealth and uHealth
Oxford University Press
Perception
Proc. of the National Academy of Sciences
Psychonomic Bulletin & Review
Quarterly J. of Experimental Psych.
Research Quarterly for Exercise and Sport
Scientific Data
Scientific Reports
Spatial Cognition and Computation
Vision Research
eBioMedicine

Professional Affiliations

DARCLE (Daylong Audio Recordings of Children's Linguistic Environments)
Division 7, American Psychological Association
Cognitive Development Society
International Congress on Infant Studies
International Society for Developmental Psychobiology
International Society for Ecological Psychology
Society for Research in Child Development
Vision Sciences Society

Teaching and Advising

Courses Taught

Undergraduate:
PSYC 12: Psychological Methods: Research Procedures (W15, F15, F16, F17, S19, S20, U20, F20, U21, F21, U22, S23, U23, F23)
PSYC 166A: Infancy (F19, S23, S24)
PSYC 169: Seminar: Perceptual-Motor Development (F14)
PSYC 169: Seminar: Infant Development (S17)

Graduate:
PSYC 207C: Processes of Cognitive Development (S16, S18, S21, S22, S24)

PSYC 258: Seminar: Vision in Everyday Behavior (S17)
PSYC 258: Seminar: Cascades in Development (W20)
PSYC 259: Principles of Data Science (W21, W22)

Student Advisees

Doctoral:
Hanzhi Wang (current)
Zachary Kelly (current)
Hailey Rousey (current)
Yushan Guo (current)
Chuan Luo (2023)
Kellan Kadooka (2022)
Brianna McGee (2022)

Masters:
Jenna Monson (2018)

Undergraduate Honors Theses:
Madelyn Caufield (2020)
Eli Labinger (2018)
Frank Somoano (2017)
Angela Char (2011, as a postdoctoral mentor)
Emma Celano (2011, as a postdoctoral mentor)
Larissa Gabelman (2009, as a graduate mentor)
Dina van der Zalm (2008, as a graduate mentor)

Undergraduate Research Grants Mentored:
Jocelyn Lam (2024), UCR Student Minigrant
Kaylee Cheung (2024), UCR Student Minigrant
Ilayna Garcia (2024), UCR Student Minigrant
Rashmi Chandrasekar (2024), UCR Student Minigrant
Juelle Ford (2022), UCR Student Minigrant
Faizah Ahmed (2022), UCR Student Minigrant
Vivian Huynh (2022), UCR Student Minigrant
Jino Sirivatanarat (2022), UCR Student Minigrant
Gabrielle Blanch (2019), UCR Student Travel Grant
Madelyn Caufield (2019), UCR Student Minigrant
Yee Lat (2019), UCR Student Minigrant
Kelsey Michaels (2019), UCR Student Minigrant
Gabrielle Blanch (2018), UCR Student Minigrant
Tramanh Truong (2018), UCR Student Minigrant
Eli Labinger (2017), Chancellor's Distinguished Fellowship

University Service

202-	Member, UCR Information Technology Space Solution Advisory Board
2023-	Member, UCR Senate Committee on Information Technology
2023-	Member, UCR Institutional Review Board
2023-	Chair, UCR Psychology Developmental Area
2023	Faculty mentor, UCR Graduate Student Mentorship Program
2023	Member, Faculty Search Committee (Dept. of Psychology)
2023	Member, UCR Chancellor's Distinguished Fellowship Advisory Board
2023	Member, UCR Undergraduate Research & Creative Activities Symposium Faculty Advisory Board
2022	Member, UCR Psychology ad hoc Instructional Technology Committee
2019-2023	Member, UC Riverside Academic Integrity Committee
2019-	Psychology Department Colloquium Series Organizer
2018	Judge, Undergraduate Research Symposium
2017-2023	Member, Undergraduate Minigrant Review Committee
2017	R'Course Facilitator
2016-2017	Member, Graduate Admissions Committee (Dept. of Psychology)
2015-	Chair, Child Studies @ UCR, childstudies.ucr.edu
2014-2015	Member, Faculty Search Committee (Dept. of Psychology)