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**EDUCATION:**

University of Minnesota, Child Psychology, Ph.D., 1990 (Advisor: Herbert L. Pick, Jr.)  
Kalamazoo College, Psychology, B.A., 1985

**ACADEMIC AND PROFESSIONAL EXPERIENCE:**

Interim Chair, Department of Biology, University of Iowa, 2021-2023  
Associate Director, University Transportation Center (SAFER-SIM), University of Iowa, 2016-present  
Chair, Department of Psychological and Brain Sciences, University of Iowa, 2011-2017  
Associate Chair, Department of Psychology, University of Iowa, 2006-2011  
Professor, University of Iowa, 2004-present  
Visiting Associate Professor, Department of Psychology, University of Michigan, Spring 2003  
Associate Professor, University of Iowa, 1996-2004  
Assistant Professor, University of Iowa, 1990-1996

**AWARDS, HONORS, SPECIAL RECOGNITIONS:**

Russell B. and Florence D. Day Chair in Liberal Arts and Sciences, 2023-  
Regents Award for Faculty Excellence, 2016  
Starch Faculty Fellow, 2015-2023  
Fellow, Association for Psychological Science, 2011-  
Collegiate Fellow, College of Liberal Arts and Sciences, University of Iowa, 2010-15  
Fellow, American Psychological Association (Division 7), 2006-  
University of Iowa Faculty Scholar Award, 2000-2003  
University of Minnesota Graduate School Doctoral Dissertation Fellowship, 1988-89  
Trainee: Center for Research in Learning, Perception, and Cognition; University of Minnesota (NICHD T32-07151), 1985-88  
Magna cum laude, Kalamazoo College  
Phi Beta Kappa

**PROFESSIONAL ORGANIZATIONS:**

American Psychological Association  
Association for Psychological Science  
Society for Research in Child Development

Psychonomic Society  
Cognitive Development Society

## SCHOLARSHIP

### **MANUSCRIPTS UNDER REVIEW/IN REVISION:**

Subramanian, L. D., Sherony, R., Kearney, J. K., Plumert, J. M., & O'Neal E. O. *How do bicyclists respond to vehicles with adaptive headlamp systems? A nighttime study in an immersive virtual environment.*

Manuscript submitted for publication.

### **PUBLICATIONS:**

86. Malik, J., Kim, N. Y., Parr, M. D. N., Kearney, J. K., Plumert, J. M., & Rector, K. (2023). Do simulated augmented reality overlays influence street-crossing decisions in non-mobility-impaired older and younger adults? *Human Factors*. <https://doi.org/10.1177/00187208231151280>
85. Parr, M. D. N., O'Neal, E. O., Zhou, S., Williams, B., Butler, K. M., Chen, A., Kearney, J. K., & Plumert, J. M. (2023). How children judge affordances when walking and bicycling across virtual roads: Does mode of locomotion matter? *Developmental Psychology*, 59(6), 1098–1108. <https://dx.doi.org/10.1037/dev0001520>.
84. Subramanian, L. D., O'Neal, E. E., Mallaro, S., Williams, B., Sherony, R., Plumert, J. M., & Kearney, J. K. (2022). A comparison of daytime and nighttime pedestrian road-crossing using an immersive virtual environment. *Traffic Injury Prevention*, 23 (2), 97-101. <https://doi.org/10.1080/15389588.2021.2023738>.
83. O'Neal, E. E., Rahimian, P., Jiang, Y., Zhou, S., Nikolas, M., Kearney, J. K., & Plumert, J. M. (2022). How do child ADHD symptoms and oppositionality impact parent-child interactions when crossing virtual roads? *Journal of Pediatric Psychology*, 47(3), 337-349. <https://doi.org/10.1093/jpepsy/jsab102>
82. Rahimian, P., Plumert, J. M., & Kearney, J. K. (2021). The effect of visuomotor latency on steering behavior in virtual reality. *Frontiers in Virtual Reality*, Volume 2, Article 727858. <https://doi.org/10.3389/frvir.2021.727858>
81. Subramanian, L. D., O'Neal, E. E., Roman, A., Sherony, R., Plumert, J. M., & Kearney, J. K. (2021). How do pedestrians respond to adaptive headlamp systems in vehicles? A road-crossing study in a virtual environment. *Accident Analysis and Prevention*, 160, 106298. <https://doi.org/10.1016/j.aap.2021.106298>
80. Parr, M. D. N., Tang, H., Mallaro, S. R., Kearney, J. K., & Plumert, J. M. (2021). Do inattention/hyperactivity and motor timing predict children's virtual road-crossing performance? *Journal of Pediatric Psychology*, 46(9), 1130-1139. <https://doi.org/10.1093/jpepsy/jsab054>
79. Malik, J., Parr, M. D. N., Flathau, J., Tang, H., Kearney, J. K., Plumert, J. M., & Rector, K. (2021). Determining the effect of smartphone alerts and warnings on the street-crossing behavior of non-mobility-impaired older and younger adults. In *CHI Conference on Human Factors in Computing Systems (CHI '21)*, May 08–13, 2021, Yokohama, Japan. ACM, New York, NY, USA, 12 pages. <https://doi.org/10.1145/3411764.3445234>

78. O'Neal, E. E., Zhou, S., Jiang, Y., Kearney, J. K., & Plumert, J. M. (2021). Let's cross the next one: Parental scaffolding of prospective control over movement. *Child Development, 92*(2), e173-e185. DOI: [10.1111/cdev.13457](https://doi.org/10.1111/cdev.13457)
77. Brown, T., Schwarz, C. Sherony, R., Plumert, J. Kearney, J., & O'Neal, E. (2020). Evaluating the safety benefits of adaptive headlamps for reducing vehicle crashes with pedestrians at night. *Traffic Injury Prevention, 21*:sup1, S183-S184 <https://doi.org/10.1080/15389588.2020.1829928>
76. Jiang, Y., O'Neal, E. E., Zhou, S., Plumert, J. M., & Kearney, J. K. (2020). Crossing roads with a computer-generated agent: Persistent effects on perception-action tuning. *ACM Transactions on Applied Perception, 18*(1), Article 4.
75. Hund, A. M., Plumert, J. M., & Recker, K. M. (2020). Visually scaling distance from memory: Do midline boundaries make a difference? *Spatial Cognition & Computation, 20*(2), 134-159.
74. O'Neal, E. E., Jiang, Y., Brown, K., Kearney, J. K., & Plumert, J. M. (2019). How does crossing roads with friends impact risk taking in young adolescents and adults? *Journal of Pediatric Psychology, 44*, 726-735.
73. O'Neal, E. E., & Plumert, J. M. (2019). Do mother-child conversations about safety differ in middle- and low-income families? *Journal of Injury and Violence Research, 11*, 171-178.
72. Plumert, J. M., Hund, A. M., & Recker, K.K. (2019). Is scaling up harder than scaling down? How children and adults visually scale distance from memory. *Cognition, 185*, 39-48.
71. Jiang, Y., O'Neal, E. E., Rahimian, P., Yon, J.P., Plumert, J. M., & Kearney, J. K. (2019). Joint action in a virtual environment: Crossing roads with risky vs. safe human and agent partners. *IEEE Transactions on Visualization and Computer Graphics, 25*, 2886-2895. DOI: [10.1109/TVCG.2018.2865945](https://doi.org/10.1109/TVCG.2018.2865945)
70. Lorenz, M. G., & Plumert, J. M. (2019). Mother-child communication about relative proximity to a landmark: What role does prototypicality play? *Journal of Experimental Child Psychology, 178*, 41-59.
69. Plumert, J. M. (2018). *Studying the perception-action system as a model system for understanding development*. Edited volume in J. Benson (Series Ed.) *Advances in Child Development and Behavior: Vol 55*, Cambridge, UK: Elsevier.
68. Plumert, J. M., & Kearney, J. K. (2018). Timing is almost everything: How children perceive and act on dynamic affordances. In J. M. Plumert (Vol. Ed.), *Studying the perception-action system as a model system for understanding development*. Edited volume in J. Benson (Series Ed.), *Advances in Child Development and Behavior: 55*. Cambridge, UK: Elsevier.
67. Rahimian, P., O'Neal, E., Plumert, J. M., and Kearney, J. K. (2018). Harnessing vehicle-to-pedestrian (V2P) communication technology: Sending traffic warnings to texting pedestrians. *Human Factors, 60* (6), 833-843.
66. Jiang, Y., O'Neal, E.E., Yon, J.P., Franzen, L., Rahimian, P., Plumert, J.P., and Kearney, J.K. (2018). Acting together: Joint pedestrian road crossing in an immersive virtual environment. *ACM Transactions on Applied Perception, 15* (2), Article 8, 13 pages. <https://doi.org/10.1145/3147884>
65. O'Neal, E. E., Jiang, Y., Franzen, L. J., Rahimian, P., Yon, J. P., Kearney, J. K., & Plumert, J. M. (2018). Changes in perception-action tuning over long time scales: How children and adults perceive and act on

dynamic affordances when crossing roads. *Journal of Experimental Psychology: Human Perception and Performance*, 44, 18-26. <http://dx.doi.org/10.1037/xhp0000378>

64. Plumert, J. M., Franzen, L., Mathews, M. M., & Violante, C. (2017). Linking “what” and “where” information: How the strength of object categories influences children’s memory for location. *Journal of Experimental Child Psychology*, 157, 95-110.
63. O’Neal, E. E., Plumert, J. M., McClure, L. A., & Schwebel, D. C. (2016). The role of body mass index in child pedestrian injury risk. *Accident Analysis & Prevention*, 90, 29-35. <https://doi.org/10.1016/j.aap.2016.02.001>
62. Nikolas, M., Elmore, A., Franzen, L., O’Neal, E., Kearney, J. K., & Plumert, J. M. (2016). Risky bicycling behavior among youth with and without attention-deficit hyperactivity disorder. *Journal of Child Psychology and Psychiatry*, 57, 141-148. <https://doi:10.1111/jcpp.12491>
61. O’Neal, E., Plumert, J. M., & Peterson, C. (2016). Parent-child injury prevention conversations following a trip to the emergency department. *Journal of Pediatric Psychology*, 41, 256-264. <https://doi.org/10.1093/jpepsy/jsv070>
60. Rahimian, P., O’Neal, E. E., Yon, J. P. , Franzen, L., Jiang, Y, Plumert, J. M., & Kearney, J. K. (2016). Using a virtual environment to study the impact of sending traffic alerts to texting pedestrians. *Proceedings of the 2016 IEEE-VR Conference*, 141-149.
59. Hilliard, C., O’Neal, E., Plumert, J., & Cook, S. W. (2015). Mothers modulate their gesture independently of their speech. *Cognition*, 140, 89-94. doi.org/10.1016/j.cognition.2015.04.003
58. Plumert, J. M., & Kearney, J. K. (2014b). How do children perceive and act on dynamic affordances in crossing traffic-filled roads? *Child Development Perspectives*, 8, 207-212. <https://doi:10.1111/cdep.12089>
57. Grechkin, T., Plumert, J. M., & Kearney, J. K. (2014). Dynamic affordances in embodied interactive systems: The role of display and mode of locomotion. *IEEE Transactions on Visualization and Computer Graphics*, 20, 596-605. <https://doi:10.1109/TVCG.2014.18>
56. Chihak, B. J., Grechkin, T. Y., Kearney, J. K., Cremer, J. F., & Plumert, J. M. (2014). How children and adults learn to intercept moving gaps. *Journal of Experimental Child Psychology*, 122, 134-152. <https://doi:10.1016/j.jecp.2013.12.006>
55. Plumert, J. P., & Kearney, J. K. (2014a). Linking decisions and actions in dynamic environments: How child and adult cyclists cross roads with traffic. *Ecological Psychology*, 26, 125-133. [special issue in honor of Herbert L. Pick, Jr.]. <https://doi:10.1080/10407413.2014.874933>
54. O’Neal, E. E. & Plumert, J. M. (2014). Mother-child conversations about safety: Implications for socializing safety values in children. *Journal of Pediatric Psychology*, 39, 481- 491. <https://doi:10.1093/jpepsy/jsu005>
53. Plumert, J. M. (2013). In memoriam: Herbert L. Pick, Jr. (1930-2012). *Spatial Cognition & Computation*, 13, 259-263.
52. Ziemer, C. J., Branson, M. J., Chihak, B. J., Kearney, J. K., Cremer, J.F., & Plumert, J. M. (2013). Manipulating perception versus action in recalibration tasks. *Attention, Perception, & Psychophysics*, 75, 1260-1274.

51. Stevens, E., Plumert, J. M., Cremer, J. F., & Kearney, J. K. (2013). Preadolescent temperament and risky behavior: Bicycling across traffic-filled intersections in a virtual environment. *Journal of Pediatric Psychology, 38*, 285-295.
50. Grechkin, T. Y., Chihak, B. J., Cremer, J. F., Kearney, J. K., & Plumert, J. M. (2013). Perceiving and acting on complex affordances: How children and adults bicycle across two lanes of opposing traffic. *Journal of Experimental Psychology: Human Perception & Performance, 39*, 23-36.
49. Plumert, J. M., Haggerty, K., Mickunas, A., Herzog, L., & Shadrick, C. (2012). Mother-child communication about location: Giving and following directions for finding hidden objects. *Developmental Psychology, 48*, 956-968.
48. Ziemer, C. J., Plumert, J. M., & Pick, A. D. (2012). To grasp or not to grasp: Infants' actions towards objects and pictures. *Infancy, 17*, 479-497.
47. Nguyen, T. D., Ziemer, C. J., Grechkin, T., Chihak, B., Plumert, J. M., Cremer, J. F., & Kearney, J. K. (2011). Effects of scale change on distance perception in virtual environments. *ACM Transactions on Applied Perception, 8*(4), 1-18.
46. Plumert, J. M., Kearney, J. K., Cremer, J. F., Recker, K. M., & Strutt, J. (2011). Changes in children's perception-action tuning over short time scales: Bicycling across traffic-filled intersections in a virtual environment. *Journal of Experimental Child Psychology, 108*, 322-337.
45. Babu, S., Grechkin, T., Chihak, B., Ziemer, C., Kearney, J., Cremer, J., & Plumert, J. (2011). An immersive virtual peer for studying social influences on child cyclists' road-crossing behavior. *IEEE Transactions on Visualization and Computer Graphics, 17*, 14-25.
44. Chihak, B. J., Plumert, J. M., Ziemer, C. J., Babu, S., Grechkin, T., Cremer, J. F., & Kearney, J. K. (2010). Synchronizing self and object movement: How child and adult cyclists intercept moving gaps in a virtual environment. *Journal of Experimental Psychology: Human Perception & Performance, 36*, 1535-1552.
43. Grechkin, T. Y., Nguyen, T. D., Plumert, J. M., Cremer, J. F., & Kearney, J. K. (2010). How does presentation method and measurement protocol affect distance estimation in real and virtual environments? *ACM Transactions on Applied Perception, 7*(4), Article 26.
42. Ziemer, C., Plumert, J. M., Cremer, J., & Kearney, K. (2009). Estimating distance in real and virtual environments: Does order make a difference? *Attention, Perception, & Psychophysics, 71*, 1095-1106.
41. Oakes, L. M., Newcombe, N. S., & Plumert, J. M. (2009). Are dynamic systems and connectionist approaches an alternative to "Good Old Fashioned Cognitive Development?" In J. P. Spencer, M. Thomas, & J. McClelland (Eds.), *Toward a unified theory of development: Connectionism and dynamic systems theory re-considered*. New York: Oxford University Press.
40. Recker, K. M., & Plumert, J. M. (2008). How do opportunities to view objects together in time influence children's memory for location? *Journal of Cognition and Development, 9*, 434-460.
39. Plumert, J. M. (2008). Children's thinking is not just about what's in the head: Understanding the organism and environment as a unified system. In R. V. Kail (Ed.), *Advances in Child Development and Behavior*, pp. 373- 417. San Diego, CA: Academic Press.

38. Plumert, J. M., & Spencer, J. (Eds.) (2007). *The emerging spatial mind*. New York: Oxford University Press.
37. Plumert, J. M., Hund, A. M., & Recker, K. M. (2007). Organism-environment interaction in spatial development: Explaining categorical bias in memory for location. In J. M. Plumert & J. Spencer (Eds.), *The emerging spatial mind*. New York: Oxford University Press.
36. Spencer, J. P., & Plumert, J. M. (2007). What makes thinking about development so hard? In J. M. Plumert & J. Spencer (Eds.), *The emerging spatial mind*. New York: Oxford University Press.
35. Plumert, J. M., & Nichols-Whitehead, P. (2007). Developmental differences in preferences for using color, size, and location information to disambiguate hiding places. *Journal of Cognition and Development, 8*, 427-454.
34. Recker, K. M., Plumert, J. M., Hund, A. M., & Reimer, R. (2007). How do biases in spatial memory change as children and adults are learning locations? *Journal of Experimental Child Psychology, 98*, 217-232.
33. Plumert, J. M., Kearney, J. K., & Cremer, J. F. (2007). Children's road crossing: A window into perceptual-motor development. *Current Directions in Psychological Science, 16*, 255-258.
32. Hund, A. M., & Plumert, J. M. (2007). What counts as "by?" Young children's use of relative distance to judge nearbyness. *Developmental Psychology, 43*, 121-133.
31. Plumert, J. M., Kearney, J. K., Cremer, J. F., & Recker, K. (2005). Distance perception in real and virtual environments. *ACM Transactions on Applied Perception, 2*, 216-233.
30. Hund, A. M., & Plumert, J. M. (2005). The stability and flexibility of spatial categories. *Cognitive Psychology, 50*, 1-44.
29. Plumert, J. M., Kearney, J. K., & Cremer, J. F. (2004). Children's perception of gap affordances: Bicycling across traffic-filled intersections in an immersive virtual environment. *Child Development, 75*, 1243-1253.
28. Kannass, K. N., Plumert, J. M., McDermott, J., Moore, B., & Durich, N. (2004). The role of the physical context in supporting young children's use of spatiotemporal organization in recall. *British Journal of Developmental Psychology, 22*, 59-82.
27. Plumert, J. M. (2004). Accidents. In A. J. Christensen, R. Martin, & J. M. Smyth (Eds.), *Encyclopedia of Health Psychology*. New York: Kluwer Academic/Plenum Publishers.
26. Hund, A. M., & Plumert, J. M. (2003). Does information about what objects are influence children's memory for where objects are? *Developmental Psychology, 39*, 939-948.
25. Schwebel, D. C., Binder, S. C., Sales, J. M., & Plumert, J. M. (2003). Is there a link between children's motor abilities and unintentional injuries? *Journal of Safety Research, 34*, 135-141.
24. Plumert, J. M. (2003). Children's overestimation of their physical abilities: Links to injury proneness. In G. Savelsbergh, K. Davids, J. van der Kamp, & S. Bennett (Eds.), *Development of movement coordination in children: Applications in the field of ergonomics, health sciences and sport*. New York: Routledge.

23. Oakes, L. M., & Plumert, J. M. (2002). Variability in thirteen-month-old infants' touching patterns in the sequential-touching task. *Infant Behavior and Development, 25*, 529-549.
22. Schwebel, D. C., Dawes, B. A., & Plumert, J. M. (2002). Using an injury diary to describe the ecology of children's daily injuries. *Journal of Safety Research, 33*, 301-319.
21. Hund, A. M., Plumert, J. M., & Benney, C. (2002). Experiencing nearby locations together in time: The role of spatial-temporal contiguity in children's memory for location. *Journal of Experimental Child Psychology, 82*, 200-225.
20. Hund, A. M., & Plumert, J. M. (2002). Delay-induced bias in children's memory for location. *Child Development, 73*, 829-840.
19. Nichols-Whitehead, P., & Plumert, J. M. (2001). The influence of boundaries on young children's searching and gathering. *Journal of Cognition and Development, 2*, 367-388.
18. Plumert, J. M., Spalding, T. L., & Nichols-Whitehead, P. (2001). Preferences for ascending and descending hierarchical organization in spatial communication. *Memory & Cognition, 29*, 274-284.
17. Plumert, J. M., & Hund, A. M. (2001). The development of memory for location: What role do spatial prototypes play? *Child Development, 72*, 370-384.
16. Plumert, J. M., & Hawkins, A. M. (2001). Biases in young children's communication about spatial relations: Containment versus proximity. *Child Development, 72*, 22-36.
15. Schwebel, D. C., Plumert, J. M., & Pick, H. L. (2000). Integrating basic and applied developmental research: A new model for the twenty-first century. *Child Development, 71*, 222-230.
14. Schwebel, D. C., & Plumert, J. M. (1999). Longitudinal and concurrent relations between temperament, ability estimation, and accident proneness. *Child Development, 70*, 700-712.
13. Plumert, J. M., & Schwebel, D. C. (1997). Social and temperamental influences on children's overestimation of their physical abilities: Links to accident proneness. *Journal of Experimental Child Psychology, 67*, 317-337.
12. Plumert, J. M., & Strahan, D. (1997). Relations between task structure and developmental changes in children's use of spatial clustering strategies. *British Journal of Developmental Psychology, 15*, 495-514.
11. Oakes, L. M., Plumert, J. M., Lansink, J. M., & Merryman, J. D. (1996). Evidence for task-dependent categorization in infancy. *Infant Behavior and Development, 19*, 425-440.
10. Plumert, J. M. (1996). Young children's ability to detect ambiguity in descriptions of location. *Cognitive Development, 11*, 375-396.
9. Plumert, J. M., & Nichols-Whitehead, P. (1996). Parental scaffolding of young children's spatial communication. *Developmental Psychology, 32*, 523-532.
8. Plumert, J. M. (1995). Relations between children's overestimation of their physical abilities and accident proneness. *Developmental Psychology, 31*, 866-876.

7. Plumert, J. M., Carswell, C., DeVet, K., & Ihrig, D. (1995). The content and organization of communication about object locations. *Journal of Memory and Language*, 34, 477-498.
6. Plumert, J. M., Ewert, K., & Spear, S. J. (1995). The early development of children's communication about nested spatial relations. *Child Development*, 66, 959-969.
5. Plumert, J. M. (1994). Flexibility in children's use of spatial and categorical organizational strategies in recall. *Developmental Psychology*, 30, 738-747.
4. Plumert, J. M., Pick, H. L., Jr., Marks, R. A., Kintsch, A. S., & Wegesin, D. (1994). Locating objects and communicating about locations: Organizational differences in children's searching and direction-giving. *Developmental Psychology*, 30, 443-453.
3. Plumert, J. M. (1993). The development of children's spatial knowledge: Implications for geographic education. *Cartographic Perspectives*, 16, 9-18.
2. Craton, L. G., Elicker, J., Plumert, J. M., & Pick, H. L., Jr. (1990). Children's use of frames of reference in communication of spatial location. *Child Development*, 61, 1528-1543.
1. Sancilio, M. F. M., Plumert, J. M., & Hartup, W. W. (1989). Friendship and aggressiveness as determinants of conflict outcomes in middle childhood. *Developmental Psychology*, 25, 812-819.

#### CONFERENCE PROCEEDINGS:

12. Mallaro, S., Rahimian, P., O'Neal, E. E., Plumert, J. M., & Kearney, J. K. (2017). A comparison of head-mounted displays vs. large-screen displays for an interactive pedestrian simulator. *Proceedings of the ACM Symposium on Virtual Reality Software and Technology*, Gothenburg, Sweden, 4 pages.
11. Jiang, Y., O'Neal, E. E., Franzen, L., Yon, J. P., Plumert, J. M., & Kearney, J. K. (2017). The influence of stereoscopic image display on pedestrian road crossing in a large-screen virtual environment. *Proceedings of the ACM Symposium on Applied Perception*, Cottbus, Germany.
10. Jiang, Y., O'Neal, E., Rahimian, P., Yon, J. P., Plumert, J. M., & Kearney, J. K. (2016). Action coordination with agents: Crossing roads with a computer-generated character in a virtual environment. *Proceedings of the ACM Symposium on Applied Perception*, 57-64.
9. Rahimian, P., Jiang, Y., Yon, J.P., Franzen, L., Plumert, J.M., & Kearney, J.K. (2015). Designing an immersive pedestrian simulator to study the influence of texting and cell-phone alerts on road crossing. *Proceedings of the Road Safety & Simulation International Conference*, Orlando, FL, 828-837.
8. O'Neal, E.E., Franzen, L., Yon, J.P., Kearney, J., Plumert, J.M. (October, 2015). How do immature movement timing skills put child pedestrians at risk for collisions with motor vehicles? *Proceedings of the Road Safety & Simulation International Conference*, Orlando, FL, 727-739.
7. Babu, S., Grechkin, T., Chihak, B., Ziemer, C., Cremer, J., Kearney, J., and Plumert, J. (March, 2009). A virtual peer for investigating social influences on children's bicycling. *Proceedings of the IEEE International Conference in Virtual Reality 2009*, Lafayette, Louisiana, pp. 91-98.



6. Chihak, B., Pick, H. L., Plumert, J., Ziemer, C., Cremer, J., & Kearney, J. (September, 2009). Optic flow and effort as cues for the perception of the rate of self-produced motion in VE. *Proceedings of the ACM International Symposium on Applied Perception in Graphics and Visualization*, Chania, Crete, Greece, p. 132.
5. Nguyen, T. D., Ziemer, C. J., Plumert, J. P., Cremer J. F., & Kearney, J. K. (September, 2009). Effects of scale change on distance perception in virtual environments. *Proceedings of the ACM International Symposium on Applied Perception in Graphics and Visualization*, Chania, Crete, Greece, pp. 27-34.
4. Grechkin, T., Babu, S., Ziemer, C., Chihak, B., Cremer, J., Kearney, J., & Plumert, J. (September, 2009). How does a virtual peer influence children's distance from the roadway when initiating crossing? *Proceedings of the ACM International Symposium on Applied Perception in Graphics and Visualization*, Chania, Crete, Greece, p. 129.
3. Plumert, J., Kearney, J., and Cremer, J. (2007) How does traffic density influence cyclists gap choices? *Proceedings of 2007 Int'l Conference on Road Safety and Simulation*, November, Rome.
2. Kearney, K. K., Grechkin, T., Cremer, J. F., & Plumert, J. M. (2006). Traffic generation for studies of gap acceptance. *Proceedings of the Driving Simulation Conference, DSC 2006*, Paris, France, 177-186.
1. Plumert, J. M., Kearney, J. K., and Cremer, J. F. (2004). Distance perception in real and virtual environments. *Proceedings of the 1<sup>st</sup> Symposium on Applied Perception in Graphics and Visualization*, August 7-8, Los Angeles.

#### **NON-REFEREED PUBLICATIONS:**

- Plumert, J. M. (2002). Pointing the way: An interactionist perspective on spatial development. *Contemporary Psychology*, 47, 535-538. [Review of Newcombe, N., & Huttenlocher, J. (2000) *Making space: The development of spatial representation and reasoning*]
- Pick, H. L., Jr., Plumert, J. M., & Arterberry, M. E. (1987). *All-terrain vehicles and children: Perceptual-motor, cognitive, and social risk factors*. Report prepared for the Consumer Product Safety Commission (Contract No. CPSC-C-87-1289).

#### **RESEARCH SUPPORT:**

##### **Extramural Grant Applications Under Review:**

“How Do Children With and Without Movement Difficulties Coordinate Decisions and Actions in Dynamic Perception-Action Tasks? Jodie Plumert (PI), Joseph Kearney (Co-I), & Elizabeth O’Neal (Co-I) NIH R01 proposal under review.

##### **Extramural Grant Support:**

“Can Augmented Reality Help Pedestrians Safely Cross Multiple Lanes of Traffic?” Jodie Plumert (PI) & Joseph Kearney (Co-PI). UI University Transportation Center, 6/1/22 – 6/30/23, \$80,000 in total costs (part of prime award, “Safety Research Using Simulation (SAFER-SIM),” awarded by the US Department of Transportation, Research and Innovative Technology Administration, Award No. 69A3551747131).

“Children’s Use of eHMI Displays to Guide Road-Crossing Decisions” Jodie Plumert (PI), Joseph Kearney (Co-PI), & Kyle Rector (Co-PI). UI University Transportation Center, 5/1/21 – 6/30/23, \$80,000 in total costs (part of prime award, “Safety Research Using Simulation (SAFER-SIM),” awarded by the US Department of Transportation, Research and Innovative Technology Administration, Award No. 69A3551747131).

“Using Augmented Reality to Help Older Adults Make Safe Road-Crossing Decisions” Kyle Rector (PI), Joseph Kearney (Co-PI), Jodie Plumert (Co-PI). UI University Transportation Center, 6/1/20 – 12/31/21, \$80,000 in total costs (part of prime award, “Safety Research Using Simulation (SAFER-SIM),” awarded by the US Department of Transportation, Research and Innovative Technology Administration, Award No. 69A3551747131).

“Using Simulation to Study Communication between Autonomous Vehicles and Vulnerable Road Users” Jodie Plumert (PI), Joseph Kearney (Co-PI). UI University Transportation Center, 6/1/19 – 12/31/20, \$80,000 in total costs (part of prime award, “Safety Research Using Simulation (SAFER-SIM),” awarded by the US Department of Transportation, Research and Innovative Technology Administration, Award No. 69A3551747131).

“Mobile Applications to Help Older Adults Make Safe Street-Crossing Decisions” Kyle Rector (PI), Jodie Plumert (Co-PI), Joseph Kearney (Co-PI). UI University Transportation Center, 6/1/18 – 12/31/19, \$50,000 in total costs (part of prime award, “Safety Research Using Simulation (SAFER-SIM),” awarded by the US Department of Transportation, Research and Innovative Technology Administration, Award No. 69A3551747131).

“Extended Evaluation of Training Programs to Accelerate Hazard Anticipation Skills in Novice Teen Drivers” Jodie Plumert (PI), Dan McGehee (Co-PI), Michelle Reyes (Co-PI), Elizabeth O’Neal (Co-PI), Shaun Vecera (Co-PI), Shawn Allen (Co-PI). UI University Transportation Center, 8/1/18 – 1/31/20, \$79,951 in total costs (part of prime award, “Safety Research Using Simulation (SAFER-SIM),” awarded by the US Department of Transportation, Research and Innovative Technology Administration, Award No. 69A3551747131).

“Evaluation of Training Programs to Accelerate Hazard Anticipation Skills in Novice Teen Drivers” Dan McGehee (PI), Jodie Plumert (Co-PI), Michelle Reyes (Co-PI), Elizabeth O’Neal (Co-PI), Shaun Vecera (Co-PI), Shawn Allen (Co-PI), Neil Lerner (Co-PI), Philip Kellman (Co-PI). AAA Foundation for Traffic Safety, 2/15/18 – 8/31/19, \$378,321 in total costs.

“Developing Connected Simulation to Study Interactions between Drivers, Pedestrians, and Bicyclists” Dan McGehee (PI), Joseph Kearney (Co-PI), Jodie Plumert (Co-PI), Chris Schwarz (Co-PI), Stephen Baek (Co-PI). DOT Federal Highway Administration, Broad Agency Announcement for Exploratory Advanced Research Program, 9/29/17 – 9/28/19, \$1,217,530 in total costs, Award No. 693JJ31750016.

“Safety Research Using Simulation (SAFER-SIM) University Transportation Center” Dawn Marshall (PI), Jodie Plumert (Co-PI), Joseph Kearney (Co-PI), Prime Award, US Department of Transportation, Research and Innovative Technology Administration, 11/5/16 – 9/30/23, \$8,200,500, Grant No. 69A3551747131.

“Using Simulation to Assess and Reduce Conflicts between Drivers and Bicyclists” Jodie M. Plumert (PI) and Joseph K. Kearney (Co-PI). UI University Transportation Center, 11/5/16 – 11/4/18, \$53,056 in total costs (part of prime award, “Safety Research Using Simulation (SAFER-SIM),” awarded by the US Department of Transportation, Research and Innovative Technology Administration, Award No. 69A3551747131).

“Multi-modal Distributed Simulation Combining Cars, Bicyclists, and Pedestrians” Joseph K. Kearney (PI) and Jodie M. Plumert (Co-PI) and. UI University Transportation Center, 11/5/16 – 11/4/18, \$53,056 in total

costs (part of prime award, “Safety Research Using Simulation (SAFER-SIM),” awarded by the US Department of Transportation, Research and Innovative Technology Administration, Award No. 69A3551747131).

“Safety Benefits of Adaptive Headlight Systems for Drivers, Pedestrians, and Bicyclists” Chris Schwarz (PI), Joseph Kearney (Co-PI), Jodie Plumert (Co-PI), Toyota Collaborative Safety Research Center (CSRC), 11/1/16-7/30/19, \$658,890 in total costs (\$311,828 in total costs, Kearney & Plumert).

“Children's Use of Visual Information to Guide Selection and Timing of Motor Behaviors” Jodie M. Plumert (P.I.), Joseph K. Kearney (C.I.), & James F. Cremer (C.I.), National Science Foundation, 6/1/13 – 11/30/18, including supplement, \$574,827 in total costs (BCS-1251694).

“Shared Virtual Environments for Studying Social Influences on Risky Cycling and Pedestrian Behavior” Joseph K. Kearney (P.I.), Jodie M. Plumert (C.I.), Molly Nikolas, (C.I.), Geb Thomas (C.I.), & James Cremer (C.I.), National Science Foundation, 12/1/13 – 11/30/17, including REU supplement, \$388,337 in total costs (CNS-1305131).

“Do Prohibitive Warnings Improve Road-crossing Safety for Texting and Non-Texting Pedestrians?” Joseph K. Kearney (PI) & Jodie M. Plumert (Co-PI). UI University Transportation Center, 06/01/16 – 6/30/17, \$59,492 in total costs (part of prime award, “Safety Research Using Simulation (SAFER-SIM),” awarded by the US Department of Transportation, Research and Innovative Technology Administration, Prime DFDA No. 20.701, Award No. DTRT13-G-UTC53).

“An Investigation of Peer Influences on Risky Child and Adolescent Pedestrian Road Crossing” Jodie M. Plumert (PI) and Joseph K. Kearney (Co-PI). UI University Transportation Center, 01/01/15 – 6/30/17, \$84,835 in total costs (part of prime award, “Safety Research Using Simulation (SAFER-SIM),” awarded by the US Department of Transportation, Research and Innovative Technology Administration, Prime DFDA No. 20.701, Award No. DTRT13-G-UTC53).

“Using Connected Vehicle Technology to Deliver Timely Warnings to Pedestrians.” Joseph K. Kearney (PI) & Jodie M. Plumert (Co-PI). UI University Transportation Center, 06/01/14 – 6/30/16, \$35,929 in total costs (part of prime award, “Safety Research Using Simulation (SAFER-SIM),” awarded by the US Department of Transportation, Research and Innovative Technology Administration, Prime DFDA No. 20.701, Award No. DTRT13-G-UTC53).

“Advancing Virtual Environments as Laboratories for Studying Human Behavior” Joseph Kearney (P.I.), James Cremer (C.I.), & Jodie M. Plumert (C.I.), National Science Foundation, 4/1/08 – 3/31/12, \$200,448 in total costs, including REU supplement (CNS-0750677).

“How Do Child Cyclists Make Decisions About Crossing Traffic-Filled Intersections?” Jodie M. Plumert (P.I.), Joseph Kearney (C.I.), & James Cremer (C.I.), National Center for Injury Prevention and Control/ Centers for Disease Control and Prevention through the UI Injury Prevention Research Center (Corrine Peak-Asa, P.I.), 9/1/2007-8/31/2013, \$226,235 in total costs (R49/CE001167).

“How Do Immature Perceptual-Motor Skills Put Child Cyclists at Risk for Injury?” Jodie M. Plumert (P.I.), Joseph K. Kearney (C.I.), & James F. Cremer (C.I.), National Institute of Child Health and Human Development, 4/1/2006-3/31/2012, \$1,530,315 in total costs (R01-HD052875).

“REU Supplement: Memory for Location: Changes over Learning and Development” Jodie M. Plumert (P.I.), National Science Foundation, 8/11/05-8/10/06, \$17,000 in total costs (BCS-0538719).

“Memory for Location: Changes over Learning and Development” Jodie M. Plumert (P.I.), National Science Foundation, 8/1/04-7/31/09, \$320,000 in total costs (BCS-0343034).

"Temperament as a Risk Factor for Bicycling Injuries" Jodie M. Plumert (P.I.), Joseph Kearney (C.I.), & James Cremer (C.I.), National Center for Injury Prevention and Control/ Centers for Disease Control and Prevention through the UI Injury Prevention Research Center (Craig Zwerling, P.I.), 9/1/03-8/31/07, \$342,657 in total costs (R49/CCR721682).

“Instrumentation for a Virtual Environment Laboratory to Study Human Behavior” James Cremer (P.I.), Joseph Kearney (Co-P.I.), & Jodie Plumert (Co-P.I.), National Science Foundation, 9/15/01-9/14/04, \$100,000 (\$66,667 NSF; \$33,333 UI) in total costs (EIA-0130864).

“Virtual Environments as Laboratories for Studying Human Behavior: Modeling, Testing, and Validation” Joseph Kearney (P.I.), James Cremer (Co-P.I.), & Jodie Plumert (Co-P.I.), National Science Foundation, 10/1/00-9/30/03, \$354,174 in direct costs (IIS 00-02535).

“The Development of Memory for Object Locations” Jodie M. Plumert (P.I.), National Institute of Child Health and Human Development, 7/1/1998-6/30/2000, \$145,000 in total costs (R03-HD36761).

#### **Intramural Grants Awarded:**

“Exploring the Mechanisms of Bicycle Injury Risk Among Child Cyclists with Attention-Deficit Hyperactivity Disorder.” Molly A. Nikolas (P.I.), Jodie M. Plumert, (Co-I), Joseph K. Kearney (Co-I), & James F. Cremer (Co-I). University of Iowa Injury Prevention Research Center, 2012-13, \$22,500 (R49-CE002108 National Center for Injury Prevention and Control).

“An Investigation of Children’s Bicycling Safety Using an Interactive, Immersive Bicycling Simulator.” Jodie M. Plumert (P.I.), Joseph Kearney, & James Cremer, University of Iowa Injury Prevention Research Center, 1997-98, \$10,000. (R49-CCR703640, National Center for Injury Prevention and Control).

“A Mediational Model of Childhood Accidents.” Jodie M. Plumert (P.I.), University of Iowa Central Investment Fund for Research Enhancement (CIFRE), 1997, \$10,000.

“Developmental Factors Contributing to Childhood Injuries: Peer Influences on Children’s Overestimation of Their Physical Ability.” Jodie M. Plumert (P.I.), University of Iowa Spelman Rockefeller Child Research Seed Grant, 1995, \$5,000.

“The Development of Spatial Organizational Skills.” Jodie M. Plumert (P.I.), University of Iowa College of Liberal Arts Seed Grant, 1995, \$2,400.

“Developmental Risk Factors Contributing to Childhood Injuries.” Jodie M. Plumert (P.I.), University of Iowa Junior Faculty Seed Grant, 1993, \$10,000.

“The Early Development of Children’s Spatial Communication Skills.” Jodie M. Plumert (P.I.), University of Iowa Central Investment Fund for Research Enhancement (CIFRE), 1993, \$1,320.

#### **University of Iowa Fellowships:**

“The Development of Children’s Road-Crossing Skills” University of Iowa Career Development Award, Fall Semester, 2008.

"Risk Factors for Bicycling Injuries" University of Iowa Faculty Scholar Award, 2000-2003.

"A New Approach to Studying Children's Bicycling Safety: The Bicycling Simulator Project" University of Iowa Semester Assignment, Spring Semester, 1999.

"The Role of Spatial Knowledge in Memory and Communication" University of Iowa Developmental Assignment, Fall Semester, 1993.

"Developmental Changes in the Ability to Communicate Spatial Information" University of Iowa Old Gold Summer Fellowship, 1991.

### **INVITED COLLOQUIA, SYMPOSIA, AND WORKSHOPS:**

Plumert, J. M. *Virtual environments as laboratories for studying human behavior*. Invited presentation at the *e3iVR: Ethics in Investigational & Interventional Uses of Immersive Virtual Reality* conference. University of Wisconsin – Madison, April 26-27, 2017.

Plumert, J. M. *Timing is (almost) everything: How children and adults cross roads in an immersive virtual environment*. Invited talk at the University of Wisconsin – Madison, October 26, 2016.

Plumert, J. M., & Kearney, J. K. *Virtual worlds: A new frontier for developmental science*. In J. Plumert (Chair), *Designing indoor, outdoor, and virtual places for children*. Invited symposium at the 46<sup>th</sup> Annual Meeting of the Jean Piaget Society, Chicago, IL, June 11, 2016.

Plumert, J. M. *Forming and using spatial groups: It's not just about what's in the head*. Invited presentation at the workshop entitled, *Spatial Memory: Bayes and Beyond*. University of Richmond, May 16-17, 2013.

Plumert, J. M., & Kearney, J. K. *The reciprocity of decisions and actions: How child and adult cyclists cross multiple lanes of traffic*. Invited presentation at *Realism to relevance: An ecological approach to perception, action, and cognition. A Festschrift to honor the scientific and mentoring contributions of Herbert L. Pick, Jr.* Minneapolis, MN, June 6<sup>th</sup>, 2012.

Plumert, J. M. *Mother-child communication about location: Are mothers attuned to children's skills?* Invited presentation at the Midwestern Psychological Association, Chicago, May 3-5, 2012.

Plumert, J. M. *Anticipating when to cross: Negotiating traffic coming from opposing directions*. Invited presentation at *Getting Ahead in Cognitive Science: The Forward-looking Nature of Perception, Action, and Cognition Workshop* at Illinois State University, Bloomington, IL, June 24-26, 2011.

Plumert, J. M. *Remembering where things go: It's not just about what's in the child's head*. Colloquium presentation in the Department of Psychology, Colby College, Waterville, ME, September 25, 2009.

Plumert, J. M. *Developmental change in synchronizing self and object movement*. Invited presentation for the UI DeLTA Center workshop entitled, *Learning and Development in Perception-Action Coupling*, March 6, 2009.

Plumert, J. M. *Categorical bias in spatial memory: The case for emergence*. Space, Analogy, and Language Learning seminar presentation, Northwestern University, November 18, 2008.

Plumert, J. M. *The development of spatial communication: Understanding proximity relations*. Spatial Intelligence and Learning Center (SILC) seminar presentation, University of Chicago and Northwestern University, November 17, 2008.

Plumert, J. M. *How do immature perceptual and cognitive skills put child cyclists at risk for injury?* Colloquium presentation in the Department of Psychology, Illinois State University, Bloomington-Normal, IL February 15, 2008.

Plumert, J. M. *Remembering spatial categories: Changes over learning and development*. Cognitive Area brown bag presentation in the Department of Psychology, University of Illinois, Champaign-Urbana, November 2, 2007.

Plumert, J. M. Invited participant in workshop on “Perception of scale and spatial orientation.” University of Utah, June 22-23, 2007.

Plumert, J. M. *Remembering where things go: It's not just about what's in the child's head*. Developmental Area brown bag presentation in the Department of Psychology, University of Chicago, May 7, 2007.

Plumert, J. M. *How do immature perceptual and cognitive skills put child cyclists at risk for injury?* Colloquium presentation in the Department of Psychology, University of Alabama, Birmingham, November 8, 2006.

Plumert, J. M. (August, 2006). Crossing the disciplinary divide: Bringing together developmental psychology and computer science to study perceptual-motor development. In J. Plumert (Chair), *Developmental Science: An Interdisciplinary Approach to Understanding Development*. Invited symposium at the 2006 APA Convention, New Orleans, LA.

Plumert, J. M. *Crossing the road safely: Children on bicycles*. Saturday Scholars presentation, College of Liberal Arts and Sciences, University of Iowa, October 15, 2005.

Plumert, J. M. *An ecological approach to perceiving, acting, and thinking*. Department of Psychology colloquium in honor of promotion to full professor, October 29, 2004.

Plumert, J. M. *Using an interactive, immersive bicycling simulator to study children's road-crossing behavior*. Colloquium presentation at the University of Michigan Transportation Research Institute (UMTRI), April 17, 2003.

Plumert, J. M. *Categorical bias in memory for location: Continuity and change over development*. Colloquium presentation at the Department of Psychology, University of Michigan, March 17, 2003.

Plumert, J. M. *Using an immersive, interactive bicycling simulator to study children's bicycling behavior*. Presentation at the Interdisciplinary Human Factors Lecture Series, University of Iowa, February 7, 2002.

Plumert, J. M. *Biases in estimates of location: Weighting perceptually available and remembered information*. Colloquium presentation at the Institute of Child Development, University of Minnesota, September 24, 1999.

Plumert, J. M. *Subdividing locations into regions: The role of boundaries and prototypes*. Presentation at the Cognitive Science Workshop, “The Ins and Outs of Spatial Representation,” Northwestern University, January 30-31, 1998.

Plumert, J. M. *The role of parental feedback in the development of children’s communication skills*. Colloquium presentation at the Department of Speech Pathology and Audiology, University of Iowa, October 4, 1995.

Plumert, J. M. *The early development of children’s spatial communication*. Colloquium presentation at the Department of Psychology, Grinnell College, April 14, 1995.

Plumert, J. M. *Continuities and discontinuities in the development of spatial communication*. Colloquium presentation at the Institute of Child Development, University of Minnesota, January 12, 1995.

Plumert, J. M. *Children’s overestimation of their physical abilities: A risk factor for childhood injuries?* Colloquium presentation at the Institute of Agricultural Medicine and Occupational Health, University of Iowa, September 13, 1994.

Plumert, J. M. *The early development of spatial communication*. Colloquium presentation at the Department of Psychology, University of Illinois, Champaign-Urbana, December 4, 1992.

Plumert, J. M. *Strategies for remembering and identifying objects: 1001 uses of spatial information*. Colloquium presentation at the Department of Psychology, Arizona State University, March 8, 1991.

## **SYMPOSIA:**

Plumert, J. M., O’Neal, E. O., & Kim, N-Y. (2023, March). Parental scaffolding of children’s prospective control in a dynamic perception-action task. In J. Plumert (Chair), *Broadening the lens on parent-child interaction as a mechanism of developmental change in children’s skills*. Symposium at the 2023 Biennial Meeting of the Society for Research in Child Development, Salt Lake City, UT.

Plumert, J. M., & Kearney, J. K. (2019, March). The development of perception-action tuning: Implications for children’s road-crossing safety. In N. Fears & J. Lockman (Chairs), *The development of visual-motor integration during activities of daily living: From research to translation*. Symposium at the 2019 Biennial Meeting of the Society for Research in Child Development, Baltimore, MD.

Plumert, J. M., & Kearney, J. K. (2015, March). How do children perceive and act on dynamic affordances when crossing roads? In N. Kassam-Adams (Chair), *Bridging the Basic-Applied Divide: The Interplay of Developmental Processes and Injury Risk*. Symposium conducted at the 2015 Biennial Meeting of the Society for Research in Child Development, Philadelphia, PA.

Plumert, J. M. (2008, September). How do child cyclists make decisions about crossing traffic-filled intersections? In J. Thomson (Chair), *Psychological competences underlying traffic behaviour and their development in children and adolescents*. Symposium presented at the 4<sup>th</sup> International Conference on Traffic & Transport Psychology, Washington, DC.

Plumert, J. M. (2007, March). Cutting it close: Developmental changes in children’s perception of traffic gaps. In J. Plumert (Chair), *Crossing the road safely: A practical challenge for the developing perception-*

*action-cognition system*. Symposium presented at the 2007 Biennial Meeting of the Society for Research in Child Development, Boston, MA.

Plumert, J. M., & Hund, A. M. (2003, April). Categorical bias in children's memory for location. In J. Plumert (Chair), *Multiple perspectives on the development of spatial categorization*. Symposium presented at the 2003 Biennial Meeting of the Society for Research in Child Development, Tampa, FL.

Plumert, J. M. (2003, April). How does information about *what* objects are influence children's memory for *where* objects are located? In J. Plumert and D. Uttal (Chairs), *Spatial cognition and the rest of cognition: Relations between spatial and nonspatial thinking*. Symposium presented at the 2003 Biennial Meeting of the Society for Research in Child Development, Tampa, FL.

Plumert, J. M., Kearney, J., & Cremer, J. (2002, April). Organizer of symposium entitled, *Virtual Environments as Tools for Studying Human Behavior*. The University of Iowa Obermann Center/Spelman Rockefeller Symposium.

Plumert, J. M., & Hund, A. M. (2001, October). A domain-general view of the development of categorization: Forming spatial groups. In J. P. Spencer (Chair), *The development of spatial cognition: A map to the child's mind?* Symposium conducted at the 2001 Meeting of the Cognitive Development Society, Virginia Beach, VA.

Plumert, J. M. (1999, April). Distortions in memory for location: What role do spatial prototypes play? In J. M. Plumert & J. P. Spencer (Chairs), *The development of spatial memory: What is remembered?* Symposium conducted at the 1999 Biennial Meeting of the Society for Research in Child Development, Albuquerque.

Plumert, J. M. (1998, August). The real reason to do research: An essay in honor of Herbert L. Pick, Jr. In L. Liben (Chair), *Symposium in honor of Herbert L. Pick, Jr.: An ecological approach to cognitive and perceptuomotor development*. Symposium conducted at the 1998 Convention of the American Psychological Association, San Francisco.

Plumert, J. M. (1995, April). Developmental change in communicating about hierarchical spatial relations. In J. Plumert (Chair), *Developmental change in the coding of spatial location*. Symposium conducted at the 1995 Biennial Meeting of the Society for Research in Child Development, Indianapolis.

Plumert, J. M. (1992, October). The development of children's spatial knowledge: Implications for cartographic education. In H. Castner (Chair), *Child development and cartographic education*. Symposium conducted at the meeting of the North American Cartographic Information Society, St. Paul, MN.

Plumert, J. M. (1991, April). Children's use of categorical and spatial clustering strategies for recalling objects. In J. Plumert & D. Uttal (Chairs), *Where do we go now? Understanding the development and use of spatial thinking in problem-solving contexts*. Symposium conducted at the 1991 Biennial Meeting of the Society for Research in Child Development, Seattle.

Elicker, J., Craton, L. G., & Plumert, J. M. (1987, April). Children's use of frames of reference in communication of spatial location. In S. Somerville (Chair), *Early spatial development: Children's use of frames of reference and coordinates*. Symposium conducted at the 1987 Biennial Meeting of the Society for Research in Child Development, Baltimore.



**POSTER AND PAPER PRESENTATIONS:**

O'Neal, E. E., Subramanian, L.D., Noonan, M., Wang, J., Kim, N.Y., Kearney, J. K., and Plumert, J. M. (April, 2023). *How do children respond to autonomous vehicle external human-machine interface cues?* Paper presented at the Biennial Meeting of the Society for Advancement of Violence and Injury Research, Denver, CO.

Kim, N. Y., O'Neal, E., Noferesti, I., Wang, J., Flathau, J., Tang, H. Kearney, J. K., & Plumert, J. M. (April, 2022). *A parent-based intervention program for training prospective control skills in children.* Poster presented at the 2022 biennial meeting of the Cognitive Development Society, Madison, WI.

O'Neal, E.E., Noonan, M.F., Tank, H., & Plumert, J.M. (April, 2022). *How do mothers and fathers socialize safety values in sons and daughters?* Poster presented at the 2022 biennial meeting of the Cognitive Development Society, Madison, WI.

Parr, M. N. D., Zhou, S., O'Neal, E., Kearney, J. K., & Plumert, J. M. (April, 2021). *How do children perceive and act on affordances when walking vs. bicycling across roads?* Poster presented at the 2021 Biennial Meeting of the Society for Research in Child Development (online).

Kim, N. Y., O'Neal, E., Flathau, J., Tang, H. Subramanian, L., Kearney, J. K., & Plumert, J. M. (April, 2021). *A parent-based intervention program for training prospective control skills in children.* Poster presented at the 2021 Biennial Meeting of the Society for Research in Child Development (online).

O'Neal, E.E. & Plumert, J.M. (April, 2019). *Peer influences on risk taking when crossing roads.* Paper presented at the Biennial Meeting of the Society for Advancement of Violence and Injury Research, Cincinnati, OH.

Parr, M. N., Tang, H., & Plumert, J. M. (March, 2019). *Relations between Attention-Deficit Hyperactivity Disorder symptomatology and performance on simple and complex timing tasks.* Poster presented at the 2019 Biennial Meeting of the Society for Research in Child Development, Baltimore, MD.

Lorenz, M. G., Carlton, M. A, Tucker, N. A., & Plumert, J. M. (March, 2019). *Do close and far labels aid young children's coding of relative proximity?* Poster presented at the 2019 Biennial Meeting of the Society for Research in Child Development, Baltimore, MD.

O'Neal, E.E. & Plumert J.M. (November, 2018). *How do parents teach children to cross roads safely? A study of parent-child road-crossing in an immersive pedestrian simulator.* Paper presented at the Safety 2018 World Conference in Bangkok, Thailand.

Lorenz, M.G., Buksa, A., & Plumert, J.P. (July, 2018). *How absolute distance from a landmark impacts young children's understanding of relative proximity.* Poster presented at the 21<sup>st</sup> Biennial Meeting of the International Congress of Infant Studies, Philadelphia, PA.

Subramanian, L.D., O'Neal, E. E., Mallaro, S., Williams, B., Plumert, J.M., & Kearney, J.K. (January, 2018). *Pedestrian road crossing at night in an immersive simulator.* Oral presentation at the 97<sup>th</sup> Transportation Research Board annual meeting, Washington, D.C.

Rahimian, P., O'Neal, E. E., Zhou, S., Yon, J.P., Franzen, L., Plumert, J.M., & Kearney, J.K. (January, 2018). *Vehicle-to-pedestrian (V2P) communications technology: Do cell phone warnings improve road-crossing safety for texting pedestrians?* Oral presentation at the 97<sup>th</sup> Transportation Research Board annual

meeting, Washington, D.C.

Lorenz, M.G., Williams, B.M., Buksa, A., & Plumert, J.M. (October, 2017). *Better close than far: How young children code relative proximity to a landmark*. Poster presented at the 10<sup>th</sup> Biennial Meeting of the Cognitive Development Society, Portland, OR.

Jiang, Y., O'Neal, E.E., Zhou, S., Plumert, J.M., & Kearney, J.K. (September, 2017). *Crossing roads with a computer-generated agent: Lasting effects on perception-action tuning*. Poster presented at the ACM Symposium on Applied Perception, Cottbus, Germany.

O'Neal, E.E., Zhao, S., & Plumert, J.M. (September, 2017). *Using an immersive virtual environment to study parent-child safety conversations in vivo*. Oral presentation given at the Biennial Meeting of the Society for Advancement of Violence and Injury Research, Ann Arbor, MI.

Lorenz, M. G., & Plumert, J. M. (April, 2017). *Giving and following directions: Mothers' sensitivity to young children's understanding of relative proximity*. Poster presented at the 2017 Biennial Meeting of the Society for Research in Child Development, Austin, TX.

O'Neal, E. E., Brown, K., Jiang, Y., Rahimian, P., Kearney, J. K., & Plumert, J. M. (April, 2017). *Parental influence on road-crossing safety*. Poster presented at the 2017 Biennial Meeting of the Society for Research in Child Development, Austin, TX.

O'Neal, E.E., Grechkin, T., Kearney, J.K., & Plumert, J.M. (December, 2016). *Crossing one-way vs. two-way simulated traffic: Differences in crash risk among adolescent bicyclists*. Oral presentation given at the 10<sup>th</sup> University Transportation Centers Spotlight Conference: Pedestrian and Bicycle Safety, Washington D.C.

O'Neal, E.E., Plumert, J.M., McClure, L.M., & Schwebel, D.C. (October, 2016). *The role of body mass index on childhood pedestrian injury*. Poster and poster pitch talk presented at the Safety 2016 World Conference, Tampere, Finland.

O'Neal, E.E. & Plumert, J.M. (October, 2016). *Proactive and reactive parent-child conversations about safety*. Poster presented at the Safety 2016 World Conference, Tampere, Finland.

Brown, K., Franzen, L., O'Neal, E., Kearney, J., & Plumert, J. (October, 2015). *Perceiving and acting on joint affordances: How children cross roads together*. Poster presented at the 9th Biennial Meeting of the Cognitive Development Society, Columbus, OH.

O'Neal, E.E., Franzen, L., Brown, K., Jiang, Y., Rahimian, P., Yon, J.P., Kearney, J.K., & Plumert, J.M. (October, 2015). *Learning to link decisions and actions: Developmental change in children's road-crossing skills*. Poster presented at the 9th Biennial Meeting of the Cognitive Development Society, Columbus, OH.

O'Neal, E.E., Franzen, L., Brown, K., Zeken, T., & Plumert, J.M. (March, 2015). *Income differences in mother-child conversations about safety*. Poster presented at the 2015 Biennial Meeting of the Society for Research in Child Development, Philadelphia, PA.

O'Neal, E.E., Grechkin, T., Franzen, L., Montgomery, Q., Kearney, J., & Plumert, J.M. (March, 2015). *Perceiving and acting on complex affordances: How children and adults cross one-way versus two-way traffic*. Poster presented at the 2015 Biennial Meeting of the Society for Research in Child Development, Philadelphia, PA.

Hilliard, C., O'Neal, E., Plumert, J., & Wagner Cook, S. (March, 2015). *Pointing gestures influence the learning of safety values in children*. Poster presented at the 2015 Biennial Meeting of the Society for Research in Child Development, Philadelphia, PA.

O'Neal, E.E., Franzen, L., Brown, K., Zeken, T., & Plumert, J.M. (March, 2015). *The potential impact of income on mother-child conversations about safety*. Poster presented at the Biennial Meeting of the Society for the Advancement of Violence and Injury Research, New Orleans, LA.

Hilliard, C., O'Neal, E., Plumert, J., & Cook, S.W. (November, 2013). *Gesturing helps parents communicate about safety*. Poster presented at the Boston University Conference for Language Development, Boston, MA.

O'Neal, Elizabeth E., Mathews, M. M., Bryant, C., & Plumert, J. M. (October, 2013). *Mother-child conversations about safety: Implications for causal understanding*. Poster presented at the 8<sup>th</sup> biennial meeting of the Cognitive Development Society, Memphis, TN.

Mathews, M. M., Franzen, L., & Plumert, J. M. (April, 2013). *What and where it is matters: How category knowledge affects children's memory for location*. Poster presented at the 36<sup>th</sup> Biennial Meeting of the Society for Research in Child Development, Seattle, WA.

Ziemer, C. J., Plumert, J. M., Chihak, B. J., Cremer, J. F., & Kearney, J. K. (November, 2012). *How does manipulating perception versus action impact recalibration?* Paper presented at the 53<sup>rd</sup> Annual Meeting of the Psychonomic Society. Minneapolis, MN.

Chihak, B. J., Plumert, J. M., Grechkin, T. Y., Cremer, J. F., & Kearney, J. K. (November, 2012). *Children benefit more than adults from variability of practice when learning to intercept moving gaps*. Poster presented at the 53<sup>rd</sup> Annual Meeting of the Psychonomic Society. Minneapolis, MN.

Ziemer, C. J., Chihak, B., Plumert, J. M., Nguyen, T. D., Cremer, J. F., Kearney, J. K. (August, 2011). *Is perception-action coupling more malleable in virtual than in real environments?* Poster presented at the ACM International Symposium on Applied Perception in Graphics and Visualization, Toulouse, France.

Chihak, B. J., Grechkin, T., Ziemer, C. J., Mickunas, A. V., Winnike, K., Plumert, J. M., Kearney, J. K., & Cremer, J. F. (April, 2011). *How learning affects child cyclists' ability to intercept moving gaps in a virtual environment*. Poster presented at the 35<sup>th</sup> Biennial Meeting of the Society for Research in Child Development, Montreal, Canada.

Mickunas, A. V., Herzog, L. E., Shadrack, C., Haggerty, K. A., & Plumert, J. M. (April, 2011). *How do young children follow their mothers' directions for finding hidden objects?* Poster presented at the 35<sup>th</sup> Biennial Meeting of the Society for Research in Child Development, Montreal, Canada.

Ziemer, C. J., Chihak, B. J., Nguyen, T. D., Branson, M., Mickunas, A. V., Plumert, J. M., Cremer, J. F., & Kearney, J. K. (April, 2011). *Flexible recalibration of perception and action in children and adults*. Poster presented at the 35<sup>th</sup> Biennial Meeting of the Society for Research in Child Development, Montreal, Canada.

Mathews, M. M., Violante, C., McCartan, D., Ziemer, C. J., & Plumert, J. M. (April, 2011). *How does knowledge about what objects are influence memory for where objects are?* Poster presented at the 35<sup>th</sup> Biennial Meeting of the Society for Research in Child Development, Montreal, Canada.

Ziemer, C. J., Chihak, B. J., Nguyen, D. T., Branson, M., Cremer, J. F., & Plumert, J. M. (November, 2010). *Perceptual-motor recalibration of locomotion in children and adults using an immersive virtual environment*. Poster presented at the 51<sup>st</sup> annual meeting of the Psychonomics Society, St. Louis, MO.

Nguyen, T. D., Grechkin, T., Cremer, C. F., Kearney, J. K., & Plumert, J. M. (July, 2010). *Effect of measurement setting in judging traveled distance: Additional evidence for underestimation of distance in virtual environments*. Poster presented at the ACM International Symposium on Applied Perception in Graphics and Visualization, Los Angeles, CA.

Ziemer, C.J., Buss, A.T., Spencer, J.P., & Plumert J.M. (October 2009). *Capturing U-shaped developmental patterns in spatial bias with Dynamic Field Theory*. Poster presented at the 6<sup>th</sup> biennial meeting of the Cognitive Development Society, San Antonio, TX.

Haggerty, K. A., & Plumert, J. M. (April 2009). *Mothers' choice of reference frames when describing locations to young children*. Poster presented at the 34<sup>th</sup> Biennial Meeting of the Society for Research in Child Development, Denver, CO.

Ziemer, C. J., Pick, A.D., & Plumert, J.M. (April 2009). *Through the looking glass: Infants' manual actions towards objects and pictures*. Poster presented at the 34<sup>th</sup> Biennial Meeting of the Society for Research in Child Development, Denver, CO.

Ziemer, C. J., Buss, A.T., Spencer, J.P., & Plumert J.M. (April 2009). *Recall of 'where' is affected by 'what': Capturing categorical biases with Dynamic Field Theory*. Poster presented at the 34<sup>th</sup> Biennial Meeting of the Society for Research in Child Development, Denver, CO.

Haggerty, K. A., & Plumert, J. M. (2007, October). *How do parents communicate to young children about object location?* Poster presented at the Biennial Meeting of the Cognitive Development Society, Santa Fe, NM.

Recker, K., Plumert, J. M., Neef, B., & Rink, A. (2007, October). *What role do objects play in children's memory for location?* Poster presented at the Biennial Meeting of the Cognitive Development Society, Santa Fe, NM.

Ziemer, C., Plumert, J. M., Chihak, B., Cremer, J., & Kearney, J. (2007, October). *How does 2-way traffic impact children's road crossing behavior in a virtual environment?* Poster presented at the Biennial Meeting of the Cognitive Development Society, Santa Fe, NM.

Ziemer, C., Plumert, J. M., Cremer, J., & Kearney, J. (2007, May). *Perceptual adaptation to environmental scale*. Poster presented at the 2007 meeting of the Vision Sciences Society, Sarasota, FL.

Recker, K. M., Plumert, J. M., & Stevens, E. N. (2007, March). *Children's memory for location is not only about what's in the head*. Poster presented at the 2007 Biennial Meeting of the Society for Research in Child Development, Boston, MA.

Recker, K. M., & Plumert, J. M. (2007, March). *How do young children use relative distance to scale location?* Poster presented at the 2007 Biennial Meeting of the Society for Research in Child Development, Boston, MA.

Ziemer, C., Plumert, J. M., Cremer, J., & Kearney, J. (2007, March). *Studying children's road-crossing behavior using an immersive, interactive bicycling simulator: How does driver behavior impact gap choices?* Poster presented at the 2007 Biennial Meeting of the Society for Research in Child Development, Boston, MA.

- Ziemer, C., Plumert, J. M., Cremer, J., & Kearney, J. (2006, November). *Do people exhibit perceptual adaptation to environmental scale?* Poster presented at the Meeting of the Psychonomic Society, Houston, TX.
- Ziemer, C., Plumert, J. M., Cremer, J., & Kearney, J. (2006, July). *Making distance judgments in real and virtual environments: Does order make a difference?* Poster presented at the 2006 Symposium on Applied Perception in Graphics and Visualization and at SIGGRAPH 2006, Boston, MA.
- Hund, A. M., & Plumert, J. M. (2005, October). *What counts as “by?” Young children’s use of relative distance to judge nearbyness.* Poster presented at the Biennial Meeting of the Cognitive Development Society, San Diego, CA.
- Recker, K., & Plumert, J. M. (2005, October). *Memory for location in a scaling task.* Poster presented at the Biennial Meeting of the Cognitive Development Society, San Diego, CA.
- Koson, K., & Plumert, J. M. (2005, April). *How do biases in memory for location emerge during learning?* Poster presented at the 2005 Biennial Meeting of the Society for Research in Child Development, Atlanta, GA.
- Plumert, J. M., Kearney, J. K., & Cremer, J. F. (2004, November). *Distance estimation in real and virtual environments.* Poster presented at the Meeting of the Psychonomic Society, Minneapolis, MN.
- Koson, K. M., & Plumert, J. M. (2003, October). *The role of object information in location memory.* Poster presented at the Biennial Meeting of the Cognitive Development Society, Park City, UT.
- Plumert, J. M., Kearney, J. K., & Cremer, J. F. (2003, October). *Virtual environments as laboratories for studying children’s cognitive development: Results from an immersive, interactive bicycling simulator.* Poster presented at the Biennial Meeting of the Cognitive Development Society, Park City, UT.
- Hund, A., & Plumert, J. M. (2001, October). *Does information about what things are influence children’s memory for where things are?* Poster presented at the 2001 Meeting of the Cognitive Development Society, Virginia Beach, VA.
- Hund, A., & Plumert, J. M. (2001, April). *Delay-induced bias in children’s memory for location.* Poster presented at the 2001 Biennial Meeting of the Society for Research in Child Development, Minneapolis, MN.
- Hund, A., & Plumert, J. M. (1999, October). *Developmental differences in location memory.* Poster presented at the meeting of the Cognitive Development Society, Chapel Hill.
- Schwebel, D. C., Dawes, S. C., Drewes, T. M., & Plumert, J. M. (1999, August). *Temperament, judgment, and bicycling injuries: Results from a bicycling simulator.* Poster presented at the annual convention of the American Psychological Association, Boston, MA.
- Plumert, J. M., & Hawkins, A. M. (1999, April). *Young children’s communication about spatial relations: “In” vs. “by”.* Poster presented at the 1999 Biennial Meeting of the Society for Research in Child Development, Albuquerque, NM.
- Schwebel, D. C., McDermott, J. A., Dawes, S. C., & Plumert, J. M. (1998, August). *Links between children’s motor coordination and injury proneness.* Poster presented at the annual convention of the American Psychological Association, San Francisco, CA.

Nichols-Whitehead, P., Plumert, J. M., & Welborn, A. (1997, April). *Young children's recognition of ambiguity in a nonverbal search task*. Poster presented at the 1997 Biennial Meeting of the Society for Research in Child Development, Washington, D. C.

Schwebel, D. C., Dawes, S. C., & Plumert, J. M. (1997, April). *Relations between children's temperament, ability overestimation, and injury proneness*. Poster presented at the 1997 Biennial Meeting of the Society for Research in Child Development, Washington, D. C.

Nichols-Whitehead, P., & Plumert, J. M. (1996, May). *Young children's recognition of ambiguity*. Poster presented at the Midwestern Psychological Association, Chicago, IL.

Martin, R., Plumert, J. M., Schwebel, D. C., & Nichols-Whitehead, P. (1996, May). *Common sense models of stress and illness in children*. Poster presented at the Midwestern Psychological Association, Chicago, IL.

Plumert, J. M., Spalding, T. L., & Lund, T. R. (1995, November). *Biases for ascending and descending spatial hierarchies in descriptions of object locations*. Poster presented at the meeting of The Psychonomic Society, Los Angeles, CA.

Plumert, J. M. (1994, November). *The role of spatial structure in communication about object locations*. Poster presented at the meeting of The Psychonomic Society, St. Louis, MO.

Plumert, J. M., Oakes, L. M., Merryman, J. D., Lansink, J. M. (1994, June). *Developmental changes in use of categorization skills between 10 and 13 months*. Poster presented at the meeting of the International Society of Infant Studies, Paris, France.

Carswell, C., & Plumert, J. M. (1993, November). *Retrieval time of memory for spatial location*. Poster presented at the meeting of The Psychonomic Society, Washington, D. C.

Plumert, J. M. (1993, March). *Young children's use of multiple landmarks to describe proximity and support relations*. Poster presented at the Biennial Meeting of the Society for Research in Child Development, New Orleans.

Plumert, J. M. (1993, March). *Making a furniture inventory from memory: Age differences in use of spatial and categorical organizational strategies*. Poster presented at the Biennial Meeting of the Society for Research in Child Development, New Orleans.

Plumert, J. M., & Carswell, C. (1992, November). *Hierarchical organization in adults' descriptions of spatial location*. Poster presented at the meeting of The Psychonomic Society, St. Louis, MO.

Sheppard, D. A., Pemberton, E., Ropp, K., Plumert, J. M., Putnam, S. (1992, April). *The mental imagery hypothesis revisited: Young children's preferences for previously drawn but forgotten pictures*. Poster presented at the Conference on Human Development, Atlanta, GA.

Plumert, J. M., & Speer, S. J. (1992, April). *Young children's use of multiple spatial relations in their descriptions of location*. Poster presented at the Conference on Human Development, Atlanta, GA.

Plumert, J. M., & Kintsch, A. S. (1991, April). *Getting the listener to the location: The structure and content of children's and adults' spatial directions*. Poster presented at the 1991 Biennial Meeting of the Society for Research in Child Development, Seattle.

Plumert, J. M., & Pick, H. L., Jr. (1989, June). *How children search for hidden objects: Developmental changes in search strategies*. Paper presented at the Nineteenth Annual Symposium of The Jean Piaget Society. Philadelphia.

Plumert, J. M., Marks, R. A., & Pick, H. L., Jr. (1988, June). *Children's search behavior and spatial memory organization*. Paper presented at the Eighteenth Annual Symposium of The Jean Piaget Society. Philadelphia.

Sancilio, M. F. M., Plumert, J. M., & Hartup, W. W. (1987, April). *Friendship and aggressiveness as determinants of conflict outcomes in middle childhood*. Poster presented at the 1987 Biennial Meeting of the Society for Research in Child Development. Baltimore.

Elicker, J., Craton, L. G., Plumert, J. M., & Pick, H. L., Jr. (1986, May). *Spatial cognition as reflected in referential communication*. Paper presented at the Sixteenth Annual Symposium of The Jean Piaget Society. Philadelphia.

## RECENT MEDIA COVERAGE:

O'Neal, Zhou, Jiang, Kearney, & Plumert (2021).

[Radio Iowa](#)

Rahimian, O'Neal, Plumert, and Kearney (2018).

BBC World Service Health Check (<https://www.bbc.co.uk/programmes/w3cswjkl>)

O'Neal, Jiang, Franzen, Rahimian, Yon, Kearney, & Plumert (2017)

ABC's Good Morning America (<http://abcnews.go.com/GMA/video/study-reveals-dangers-kids-crossing-street-46907073>)

O'Neal, Plumert, & Peterson (2016)

New York Magazine (<http://nymag.com/scienceofus/2015/10/girls-boys-get-different-talks-after-accidents.html#>)

Iowa Public Radio (<http://iowapublicradio.org/term/injury#stream/0>)

Yahoo Parenting (<https://www.yahoo.com/parenting/saying-be-careful-to-kids-actually-makes-a-201243853.html>)

O'Neal & Plumert (2014)

Huffington Post ([http://www.huffingtonpost.com/2014/03/21/keeping-kids-safe\\_n\\_5008302.html](http://www.huffingtonpost.com/2014/03/21/keeping-kids-safe_n_5008302.html))

Scientific American (<http://www.scientificamerican.com/podcast/episode/explain-danger/>)

Academic Minute (<http://academicminute.org/2014/07/jodie-plumert-university-of-iowa-understanding-safety/>)

Live Science (<http://www.livescience.com/44214-talking-about-child-safety.html>)

## STUDENT SUPERVISION

## UNDERGRADUATE HONORS THESIS SUPERVISION:

- Spear, Sara J. (1992). The early development of spatial communication.
- Albright, M. (1993). Children's use of proximal and distal landmarks in their communication of spatial location.
- Ihrig, D. (1996). Transfer of spatial clustering skills in searching and direction-giving.
- Dunisch, D. (1996). Development of hierarchical organization in children's spatial directions.
- Welborn, A. (1997). Young children's recognition of ambiguity.
- McDermott, J.A. (1998). Relations between children's judgments about their physical abilities and motor coordination.
- Dawes, S. (1998). Temperament, motor coordination, and overestimation of physical ability.
- Rains, S. (1999). The relationship between children's temperament and performance on an interactive, immersive bicycling simulator.
- Koschmeder, S. (1999). Children's judgments of traffic gap affordances on an interactive, immersive bicycling simulator.
- Fraga, B. (2000). A comparison of distance estimates in real and simulated environments.
- Benney, C. (2000). The role of temporal and spatial contiguity in children's memory for locations.
- Howell, R. A. (2003). Changes in category bias of location memory over learning.
- Neef, B. (2008). What role do objects play in children's memory for location?
- Beery Rothmeyer, J. (2008). How do mothers give directions for finding objects to young children?
- Herzog, L. E. (2010). Differences in young children's ability to understand frames of reference. [Thesis submitted to Kalamazoo College]
- Violante, T. (2010). Developmental changes in spatial clustering as a function of object relatedness. [Thesis submitted to Kalamazoo College]
- Franzen, L. J. (2013). What and where it is matters: How category knowledge affects memory for location.
- Brown, Kathryn (2016). Perceiving and acting on joint affordances: How children cross roads together.
- Zhou, Shiwen (2018). Parent-child conversations about road-crossing safety in an immersive pedestrian simulator.

#### **M.A. THESIS SUPERVISION:**

- Ewert, K. (1993). A spatial perspective on the experience of time.



Jasper, J. D. (1993). Investigating the effects of rotation on words for males and females differing in spatial and verbal ability: A new methodological perspective. (co-supervised with I. Levin)

Carswell, C. (1993). A closer examination of hierarchical organization in the structure of spatial memory.

### **FIRST-YEAR PROJECT SUPERVISION:**

Nichols-Whitehead, P. (1995). Young children's recognition of ambiguity in a nonverbal search task.

Hawkins, A. M. (1998). Young children's communication about containment and proximity.

Hund, A. M. (1998). The influence of boundaries on location memory.

Lee, J. (2002). Children's strategy use in a search task involving nested landmarks.

Koson, K. (2003). The role of object information in location memory.

Ziemer, C. (2006). Perceptual adaptation to environmental scale.

Haggerty, K. (2007). How do mothers communicate to young children about location?

O'Neal, E. (2012). Connecting the dots: Mother-child conversations about safety.

Parr, M. (2018). Relations between Attention-Deficit Hyperactivity Disorder symptomatology and performance on simple and complex timing tasks.

Kim, N. Y. (2021). Early and concurrent effortful control as a predictor of risky bicycling performance: Moderating influences of age, gender, and experience.

### **PH.D. THESIS SUPERVISION:**

Ewert, K. (1998). Time judgments in uniform motion events: The effects of visual distance and visual speed information.

Schwebel, D. C. (2000). Relations between children's temperament, ability estimation, and unintentional injuries.

Hund, A. M. (2003). Developmental changes in the flexibility and stability of spatial category formation based on spatiotemporal experience.

Nichols-Whitehead, P. (2003). Informational biases, parent-child interactions, and the development of referential communication skills.

Recker, K. M. (2008). How do children use relative distance to scale?

Ziemer, C. (2012). Flexible recalibration of perception and action in children and adults.

O'Neal, E. (2018). Mother-child conversations about safety in children with and without ADHD.

Lorenz, M. (2019). Close, far, wherever they are: How young children code relative proximity to a landmark.

#### **PH.D. COMMITTEE SERVICE**

Selner, M. B. (1992, Psychology, Chair: Knutson)  
 Loge, D. V. (1993, Psychology, Chair: Casey)  
 Roecker, C. A. (1993, Psychology, Chair: Casey)  
 Furuseth, A. M. (1993, Psychology, Chair: Casey)  
 DeVolder, C. L. (1993, Psychology, Chair: Wasserman)  
 Wang, X. (1994; College of Education)  
 Lu, I-Chung. (1994; College of Education)  
 DeVet, K. A. (1994, Psychology, Chair: Knutson)  
 Brito, C. F. (1994, Psychology, Chair: Zimba)  
 Lee, J. (1995, Psychology, Chair: Heinrichs)  
 Ozcan, N. M. (1997; College of Education)  
 Boyd, R. C. (1998, Psychology, Chair: Knutson)  
 Coy, K. (2000, Psychology, Chair: Kochanska)  
 Maher, S. J. (2000, Psychology, Chair: Knutson)  
 Kannass, K. N. (2001, Psychology, Chair: Oakes)  
 Forman, D. (2002, Psychology, Chair: O'Hara)  
 Wald, R. L. (2003, Psychology, Chair: Knutson)  
 Ross-Sheehy, S. (2004, Psychology, Chair: Oakes)  
 Schutte, A. (2004, Psychology, Chair: Spencer)  
 Kovack-Lesh, K. (2007, Psychology, Chair: Oakes)  
 Simmering, V. (2008, Psychology, Chair: Spencer)  
 Latzmen, R. (2010, Psychology, Chair: L. Clark)  
 Franklin, C. (2010, Psychology, Chair: O'Hara)  
 Nylen, K. (2010, Psychology, Chair: O'Hara)  
 Shay, N. (2010, Psychology, Chair: Knutson)  
 Murray, A. (2011, Psychology, Chair: Knutson)  
 Nguyen, T. D. (2011, Computer Science, Chair: Cremer)  
 Valles, N. L. (2012, Psychology, Chair: Knutson)  
 Grechkin, T. (2012, Computer Science, Chair: Kearney)  
 Perry, L. (2012, Psychology, Chair: Samuelson)  
 Taber-Thomas, S. M. (2013, Psychology, Chair: Knutson)  
 Jiang, Y. (2018, Computer Science, Chair: Kearney)  
 Ullsperger, J. (2019, Psychological & Brain Sciences, Chair: Nikolas)  
 Rahimian, P. (2019, Computer Science, Chair: Kearney)  
 Gold, J. (2019, Psychological & Brain Sciences, Chair: Vander Weg)  
 Momany, A. (2019, Psychological & Brain Sciences, Chair: Nikolas)  
 Boldt, L. (2020, Psychological & Brain Sciences, Chair: Kochanska)  
 Goffin, K. (2021, Psychological & Brain Sciences, Chair: Kochanska)  
 Subramanian, L. D. (2022, Computer Science, Chair: Kearney)  
 Sodoma, M. (in progress, Psychological & Brain Sciences, Chair: Voss)  
 Miller, J. (in progress, Psychological & Brain Sciences, Chair: Windschitl)  
 Malik, J. (in progress, Computer Science, Chair: Kearney)

#### **RESEARCH ADVISORY COMMITTEE SERVICE:**

Nichols-Whitehead, P. (primary advisor)  
 Schwebel, D. (primary advisor)  
 Hawkins, A. (primary advisor)  
 Hund, A. (primary advisor)  
 Lee, J. (primary advisor)  
 Koson, K. (primary advisor)  
 Ziemer, C. (primary advisor)  
 Haggerty, K. (primary advisor)  
 Branson, M. (primary advisor)  
 O'Neal, E. (primary advisor)  
 Parr, M. (primary advisor)  
 Kim, A. (primary advisor)

Berglan, L.  
 Coy, K.  
 Kannass, K.  
 Deng, H.  
 Stansfield, M.  
 Crigger, A.  
 Perone, S.  
 Hammond, E.  
 de la Paz, L.  
 Madero, B.

Forman, D.  
 Ribar, R.  
 Schutte, A.  
 Wisnowski, J.  
 Simmering, V.  
 Kovack, K.  
 Perry, L.  
 Kathryn Goffin  
 Nelson, P.  
 Bendel-Stenzel, L.

## SERVICE

### DEPARTMENTAL SERVICE:

#### Administrative Positions:

Interim Chair, Department of Biology, 2021-present  
 Director of Graduate Studies, Department of Psychological and Brain Sciences, 2018-2021  
 Chair, Department of Psychological and Brain Sciences (2011-2017)  
 Associate Chair, Department of Psychology (2006-2011)

#### Departmental Committees:

Chair's Consulting Group, 2006-2011, 2018-2021  
 Committee on Undergraduate Studies, 1991-93, 2006-2011  
 Committee on Graduate Studies, 1996-2004, Fall, 2006  
 Faculty Advisory Committee, 1993-1996, 2005-06  
 Coordinator of the Developmental Science Graduate Training Area, 1996-2004, Fall, 2006

#### Ad-hoc Departmental Committees:

Faculty Search Committee in Developmental Psychology (1995-96)  
 Faculty Search Committee in Developmental Psychology, Chair (1996-97)  
 Faculty Search Committee in Cognition and Perception (1997-98)  
 Faculty Search Committee in Developmental Psychology (1998-99)  
 Faculty Search Committee in Developmental Psychology, Chair (1999-2000)  
 Courseload Task Force Committee (Fall, 1999)  
 Promotion and Tenure Committee for Susan Lutgendorf (2000-2001)  
 Promotion and Tenure Committee for John Freeman (2001-2002)  
 Faculty Search Committee in Developmental Psychology (2001-02)  
 Faculty Search Committee in Developmental Psychology, Chair (2003-2004)  
 Diversity Committee, 2004-2006  
 Faculty Search Committee in Cognition and Perception (2006-07)  
 Promotion and Tenure Committee for Scott Robinson (2006-2007)  
 Promotion and Tenure Committee for Shaun Vecera (2006-2007)  
 Promotion and Tenure Committee for Pamela Keel, Chair (2007-2008)

Promotion and Tenure Committee for Larissa Samuelson, Chair (2008-2009)  
 Faculty Search Committee in Behavioral & Cognitive Neuroscience (2009-2010)  
 Grants Administrator Review Committee for Dana Lange (2010)  
 Grants Administrator Search Committee (2010)  
 Psychology Building Committee (2010-present)  
 Psychology Departmental Administrator Search Committee (2012)  
 Psychology Grants Administrator Search Committee (2013)  
 Department Restructuring Committee (2015)  
 Faculty Search Committee in Developmental Psychology (2016-17)  
 Faculty Search Committee in Learning and Neuroplasticity (2018-2019)  
 Faculty Search Committee for Ketchel Chair and Professor (2021-present)

### **COLLEGIATE SERVICE:**

Faculty Assembly, 2002-2006  
 Faculty Assembly Diversity Committee, 2004-2006, Chair, 2005-2006  
 College of Liberal Arts and Sciences, New Faculty Orientation, 2005-2010, 2016  
 Promotion and Tenure Committee for Warren Darling (2006-2007, Department of Integrative Physiology)  
 CLAS Collegiate Consulting Group for promotion and tenure, 2006-2008  
 Promotion and Tenure Committee for Carol Coohy (2009-2010, School of Social Work)  
 College of Liberal Arts and Sciences Educational Policy Committee, 2009-2011  
 College of Liberal Arts and Sciences Self Study Committee, 2012-13  
 College of Liberal Arts and Sciences DEO Advisory Group to the Dean, 2016-2017  
 College of Liberal Arts and Sciences We Are Phil Committee, 2018-2019  
 Promotion and Tenure Committee for Gary Pierce (2020-2021, Health and Human Physiology Department)  
 Promotion and Tenure Committee for Anu Subramanian (2020-2021, Communication Sciences and Disorders Department)  
 College of Liberal Arts and Sciences Graduate Education Policy Committee, 2021-

### **UNIVERSITY SERVICE:**

Opportunity at Iowa Review Committee (1996)  
 Ida Beam Selection Committee, 2004, 2005  
 Obermann Center for Advanced Studies Advisory Committee, 2005-2008, Chair, 2007-2008  
 Faculty Scholar Award review committee, 2005, 2007  
 Friday After Class, invited presentation to minority and first-generation college students (sponsored by Trio Student Support Services and Center for Diversity & Enrichment)  
 Aging Mind and Brain Initiative (AMBI), Executive Committee, 2011-2019  
 Iowa Neuroscience Institute Director Search, Carver College of Medicine, 2015-2016  
 Faculty Council Administrative Retreat, DEO Panel Presentation, August 15, 2016  
 Department of Psychiatry Chair Search, Carver College of Medicine, 2017-2018  
 Regents Award for Faculty Excellence Review Committee, 2018  
 Faculty Perception of Administrator Review Committee for Dan McGehee, College of Engineering, 2019  
 Carver College of Medicine Review Committee (Chair), 2019  
 Strategic Plan Action and Resource Committee (SPARC), Faculty Retention, 2022-

### **SERVICE TO OTHER INSTITUTIONS**

Iowa State University, Department of Psychology External Review Committee (Chair), 2020

**PROFESSIONAL SERVICE**

## Editorships:

*Journal of Experimental Child Psychology* (Associate Editor, 2007-2010)

## Editorial Boards:

*Spatial Cognition and Computation* (2019-present)  
*Journal of Experimental Psychology: Applied* (2013-present)  
*Journal of Experimental Child Psychology* (2010-present)  
*Child Development* (2003-2006)

## Executive Boards:

*APA Division 7* (2004-2007)  
*Secretary* (2004-2007)  
*Fellows Committee* (2005)  
*Dissertation Award Committee* (2005-2006, 2006-2007)

## Journal Reviewing:

<i>Child Development</i>	<i>Cognitive Development</i>
<i>Developmental Psychology</i>	<i>Memory</i>
<i>International Journal of Behavioural Development</i>	<i>Developmental Review</i>
<i>Journal of Experimental Psychology: General</i>	<i>Journal of Memory and Language</i>
<i>Merrill-Palmer Quarterly</i>	<i>Memory &amp; Cognition</i>
<i>Journal of Experimental Child Psychology</i>	<i>Journal of Comparative Psychology</i>
<i>British Journal of Developmental Psychology</i>	<i>Journal of Cognition and Development</i>
<i>Developmental Psychobiology</i>	<i>Cognitive Processing</i>
<i>Journal of Applied Developmental Psychology</i>	<i>Canadian Psychology</i>
<i>Journal of Child Language</i>	<i>Journal of Environmental Psychology</i>
<i>Journal of Pediatric Psychology</i>	<i>Transportation Research C</i>
<i>Current Directions in Psychological Science</i>	<i>Attention, Perception, &amp; Psychophysics</i>
<i>Spatial Cognition &amp; Computation</i>	<i>Psychological Science</i>
<i>Journal of Experimental Psychology: HPP</i>	<i>Journal of Experimental Psychology: Applied</i>
<i>Human Factors</i>	

## Book Reviewing:

<i>MIT Press</i>	<i>Lawrence Earlbaum Associates</i>
<i>Prentice-Hall</i>	<i>Worth Publishers</i>

## Grant Reviewing:

Ad-hoc panel member of the National Institutes of Health HUD-1 (1999)  
 Ad-hoc reviewer for National Science Foundation (1995; 1999; 2010; 2011)  
 National Science Foundation, Developmental & Learning Sciences, College of Reviewers, 2013-2017  
 Israel Science Foundation (2003, 2021)

Site visit reviewer for National Science Foundation Science of Learning Center: 2004, 2005 (declined in 2005 – conflict of interest), 2013, 2014, 2015

Panelist for National Science Foundation (2005, 2007, 2020)

Canada Council for the Arts, reviewer for Killam Research Fellowship, 2005

#### Reviewing for Professional Meetings:

Division 7 (Developmental Psychology) reviewer of submissions to the 1996 annual convention of the American Psychological Association.

Reviewer of submissions to the 1997, 1999, 2001, 2003, 2005, 2007, 2011, 2019, 2021, 2023 Biennial Meeting of the Society for Research in Child Development.

Reviewer of submissions to the 2004 and 2005 Meeting of the Cognitive Science Society.

Reviewer of submissions to the 2018 ACM Symposium on Applied Perception.

#### COMMUNITY SERVICE:

Plumert, J. M. *Why do children have so many accidents?* Presentation for parents at the Sprout House, sponsored by Alice's Rainbow Childcare Centers and the Obermann Center for Advanced Studies, University of Iowa, April 30, 1997.

Plumert, J. M. *Poor judgment: The role of ability overestimation in childhood accidents.* Paper presented at the annual fall conference of the Iowa Association of Safety Education, Iowa City, IA, November 9, 2001.

*The scientist and public responsibility: Snail sex, sciences, and federal funding.* Participant in panel discussion hosted by Café Scientifique of Iowa City, June 5, 2013.

Participant in panel discussion organized by UI IRB after screening of film, *Three Identical Strangers*, at Film Scene, Iowa City, IA, September 5, 2018.