

Peer Reviewed Publications by **Dr. Jaya Rachwani**  
2000 - Present

- Karpatkin, H., **Rachwani, J.**, Rhodes, R., Rodriguez, L., Rodriguez, R., Rubeo, A., & Cohen, E. (in press). The effect of intermittent vs. Continuous walking on distance to fatigue in persons with multiple sclerosis. *Disability and Rehabilitation*.
- Kaplan, B. E., **Rachwani, J.**, Tamis-LeMonda, C. S., & Adolph, K. E. (2022). The process of learning the designed actions of toys. *Journal of Experimental Child Psychology*, 221:105442.
- Rachwani, J.**, Herzberg, O., Kaplan, B. E., Comalli, D. M., O'Grady, S. M., & Adolph, K. E. (2022). Flexibility in Action: Development of locomotion under overhead barriers. *Developmental Psychology*, 58(5), 807-820.
- Rachwani, J.**, Kaplan, B. E., Tamis-LeMonda, C. S., & Adolph, K. E. (2021). Children's use of everyday artifacts: Learning the hidden affordance of zipping. *Developmental Psychobiology*, 63(4), 793-799.
- Santamaria V.,\* **Rachwani J.**,\* Saussez, G., Bleyenheuft, Y., Dutkowsky, J., Gordon A. M., & Woollacott, M. H. (2020). The seated postural & reaching control test in cerebral palsy: A validation study. *Physical and Occupational Therapy in Pediatrics*, 40(4), 441-469.  
**\*Joint first authors.**
- Rachwani, J.**, Tamis-LeMonda, C. S., Karasik, L. B., Lockman, J. J., & Adolph, K. E. (2020). Learning the designed action of everyday objects. *Journal of Experimental Psychology: General*, 149(1), 67-78.
- Santamaria, V., & **Rachwani, J.** (2020). Commentary on "Development and Validity of the Clinical Assessment of Body Alignment for Children With Cerebral Palsy". *Pediatric Physical Therapy*, 32(2), 143.
- Hoch, J. E., **Rachwani, J.**, & Adolph, K. E. (2020). Looking and locomotion: Real-time dynamics of locomotor exploration in crawling and walking infants. *Child Development*, 91(3), 1001-1020.
- Rachwani, J.**, Hoch, J.E., & Adolph, K. E. (2020). Action in development: Variability, flexibility, and plasticity. In C. S. Tamis-LeMonda & J. J. Lockman (Eds.). *Handbook of Infant Development*. Cambridge University Press, pp. 449-494.
- Rachwani, J.**, Herzberg, O., Golenia, L., & Adolph, K. E. (2019). Postural, visual, and manual coordination in the development of prehension. *Child Development*, 90(5), 1559-1568.

- Soska, K. C., **Rachwani, J.**, Hofsten, C., & Adolph, K. E. (2019). Infants plan prehension while pivoting. *Developmental Psychobiology*, 61(7), 1048-1063.
- Adolph, K.E., **Rachwani, J.**, & Hoch, J.E. (2018). Motor and physical development: Locomotion. *Reference Module in Neuroscience and Biobehavioral Psychology*. Elsevier. ISBN 9780128093245.
- Rachwani, J.**, Soska, K. C., & Adolph, K. E. (2017). Behavioral flexibility in learning to sit. *Developmental Psychobiology*, 59(8), 937-948.
- Santamaria, V., **Rachwani, J.**, Manselle, W., Saavedra, S. L., & Woollacott, M. H. (2017). The impact of segmental trunk support on reaching and posture while sitting in healthy adults. *Journal of Motor Behavior*, 50(1), 51-64.
- Santamaria, V., **Rachwani, J.**, Saavedra, S. L., & Woollacott, M. H. (2016). The impact of segmental trunk support on posture and reaching in children with moderate and severe cerebral palsy. *Pediatric Physical Therapy*, 28(3), 285-293.
- Rachwani, J.**, Santamaria, V., Saavedra, S. L., & Woollacott, M. H. (2015). The development of trunk control and its relation to reaching in infancy: A longitudinal study. *Frontiers in Human Neuroscience*, 9(94), 1-12.
- Rachwani, J.**, Santamaria, V., Saavedra, S. L., Wood, S., Porter, F., & Woollacott, M. H. (2013) Segmental trunk control acquisition and reaching in typically developing infants. *Experimental Brain Research*, 228(1), 131-139.
- Santamaria, V., & **Rachwani, J.** (2010). Fisioterapia en la artropatía hemofílica de rodilla. *Cuestiones de Fisioterapia: Revista Universitaria de Información e Investigación en Fisioterapia*, 39(1), 68-77.
- Rachwani, J.** (2021, September). *Variability, flexibility, and plasticity in infant motor development*. The International Motor Development Research Consortium. Conference Online. Invited Presentation.

Peer-Reviewed Presentations by **Dr. Jaya Rachwani**  
2000 - Present

- Delfing, D., Chin, K., Hentrich, L., Friel, K. M., Imms, C., Santamaria, V., **Rachwani, J.**, Gordon, A. (2022, September). *Using prompting to assess engagement in rehabilitation settings*. American Academy for Cerebral Palsy and Developmental Medicine. Las Vegas, NV. Platform presentation.

**Rachwani, J.**, Ai, X., Santamaria, V., Goldstone, H., Kanneth, J., Karim, N., Schulteis, J., & Agrawal, S. (2022, February). *Development of sitting balance: Limits of Stability*. Combined Sections Meeting of the American Physical Therapy Association. San Antonio, TX. Poster presentation.

Delfing, D., Chin, K., Hentrich, L., Friel, K.M., Imms, C., Santamaria, V., **Rachwani, J.**, & Gordon, A. (2021, September). *The role of engagement in upper extremity interventions for children with unilateral cerebral*. American Academy for Cerebral Palsy and Developmental Medicine. Conference online. Platform Presentation.

Delfing, D., Chin, K., Hentrich, L., Friel, K.M., Imms, C., Santamaria, V., **Rachwani, J.**, & Gordon, A. (2021, September). *Quantifying engagement in a pediatric rehabilitation setting*. American Academy for Cerebral Palsy and Developmental Medicine. Conference online. Platform presentation.

Han, D., **Rachwani, J.**, Choudhury, S., & Adolph, K.E. (2021, September). *Why infants fall: Development changes the cause of errors as infants acquire new skills*. International Motor Development Research Consortium. Conference online. Platform presentation.

Kaplan, B. E., Kasaba, I., **Rachwani, J.**, Tamis-LeMonda, C.S., & Adolph, K.E. (2021, June). *How mothers teach their children to use everyday objects*. Development in Motion Conference. Conference online. Poster presentation.

**Rachwani, J.** (2021, April). *How children learn the everyday designed artifacts of their culture*. Society for Research in Child Development. Symposium Chair. Conference online. Platform Presentation.

Kaplan, B. E., **Rachwani, J.**, Tamis-LeMonda, C.S., & Adolph, K.E. (2021, April). *Deceptively simple: The perceptual-motor and social factors in children's learning of the designed actions of objects*. Society for Research in Child Development. Conference online. Platform presentation.

Han, D., **Rachwani, J.**, Yueqiao, L., & Adolph, K.E. (2021, April). *Why infants fall: Development changes the cause of errors as infants acquire new skills*. Society for Research in Child Development. Conference online. Platform presentation.

**Rachwani, J.**, Miles, C., Hospodar, C., Kaplan, B.E., & Adolph, K.E. (2021, February). *Feasibility of using head-mounted eye tracking to characterize children's looking behavior in natural settings*. Combined Sections Meeting of the American Physical Therapy Association. Conference online. Poster presentation.

**Rachwani, J.**, Herzberg, O., Ossmy, O., & Adolph, K.E. (2021, February). *Trunk control predicts infants' postural adaptation: Maintaining balance from long to short sit*. Combined

Sections Meeting of the American Physical Therapy Association. Conference online. Poster presentation.

Karpatkin, H. I., Rubeo, A., Rodriguez, A., Rodriguez, L., Rhodes, R., & **Rachwani, J.** (2021, February). *Treadmill walking differs from overground walking in persons with multiple sclerosis*. Combined Sections Meeting of the American Physical Therapy Association. Conference online. Poster Presentation.

Karpatkin, H. I., **Rachwani, J.**, Riva, S., Russo, K., Stevens, S., & Yu, W. (2021, February). *The effect of cooling vests on walking endurance in persons with multiple sclerosis*. Combined Sections Meeting of the American Physical Therapy Association. Conference online. Poster presentation.

Delfing, D., Hentrich, L., **Rachwani, J.**, Santamaria, V., Imms, C., & Gordon, A. (2020, September). *Quantifying and examining engagement levels during therapeutic interventions in children with cerebral palsy*. American Academy for Cerebral Palsy and Developmental Medicine. Conference online. Platform presentation.

Delfing, D., **Rachwani, J.**, Santamaria, V., Imms, C., & Gordon, A. (2020, September). *Engagement in rehabilitation: Key components and outcome variables*. American Academy for Cerebral Palsy and Developmental Medicine. Conference online. Poster presentation.

Surana, B., Santamaria, V., Luna, T.D., **Rachwani, J.**, Gordon, A., & Agrawal, S. (2020, September). *Segmental intensive training for children with cerebral palsy GMFCS IV-V*. American Academy for Cerebral Palsy and Developmental Medicine. Conference online. Poster presentation.

**Rachwani, J.**, Herzberg, O., Teng, T., & Adolph, K.E. (2020, July). *Real-time postural transitions in infant development*. International Congress of Infant Studies. Conference online. Poster presentation.

Kaplan, B. E., **Rachwani, J.**, Zhang, C., Shilling, M., Tamis-LeMonda, C.S., & Adolph, K.E. (2020, July). *Scaffolding motor action: How mothers teach infants the designed actions of everyday objects*. International Congress of Infant Studies. Conference online. Poster presentation.

Han, D., **Rachwani, J.**, Cheng, M., Liu, Y., & Adolph, K.E. (2020, July). *Why do infants fall? Causes of falls across the development of walking*. International Congress of Infant Studies. Conference online. Poster presentation.

Karpatkin, H., Rhodes, R., Rodriguez, L., Rodriguez, R., Rubeo, A., & **Rachwani, J.** (2020, February). *The effects of intermittent versus continuous walking on gait fatigability in*

*persons with multiple sclerosis*. Combined Sections Meeting of the American Physical Therapy Association. Denver, CO. Poster presentation.

**Rachwani, J.**, & Herzberg, O. (2019, November). *A systems approach to motor development and intervention*. Academy of Pediatric Physical Therapy Annual Conference (APPTAC). Anaheim, CA. Invited Presentation.

Adolph, K.E., **Rachwani, J.**, Kretch, K.S., & Herzberg, O. (2019, November). *The power of video to understand, capture, and quantify motor behavior*. Academy of Pediatric Physical Therapy Annual Conference (APPTAC). Anaheim, CA. Invited Presentation.

Adolph, K.E., **Rachwani, J.**, & Herzberg, O. (2019, March). *Understanding, capturing, and quantifying functional motor behavior*. Neuro-Developmental Treatment Association Annual Conference. Charlotte, NC. Invited Presentation.

Kaplan, B.E., **Rachwani, J.**, Han, D., Tamis-LeMonda, C.S., & Adolph, K.E. (2019, March). *Children's use of everyday artifacts: Cognitive and perceptual-motor requirements of unzipping a zipper*. Society for Research in Child Development. Baltimore, MD. Poster presentation.

Ossmy, O., Han, D., Cheng, M., Kaplan, B.E., **Rachwani, J.**, Tamis-LeMonda, C.S., & Adolph, K.E. (2019, March). *Real-time problem solving in children and adults: The development of predictive planning in object fitting*. Society for Research in Child Development. Baltimore, MD. Poster presentation.

**Rachwani, J.**, Kaplan, B.E., Tamis-LeMonda, C.S., Karasik, L.B., Lockman, J.J., & Adolph, K.E. (2018, July). *Learning the designed actions of everyday objects*. International Congress on Infant Studies. Philadelphia, PA. Poster presentation.

Kaplan, B. E., **Rachwani, J.**, Sidi, A., Vasa, A., Tamis-LeMonda, C.S., & Adolph, KE. (2018, July). *Perceptual-motor exploration and problem solving: Learning the designed action of Duplo bricks*. International Congress on Infant Studies. Philadelphia, PA. Poster presentation.

Borenstein, H., Chen, A., Xu, M., Kaplan, B. E., **Rachwani, J.**, Tamis-LeMonda, C.S., & Adolph, K.E. (2018, July). *A toy's story: Exploration, discovery, implementation, and construction*. International Congress on Infant Studies. Philadelphia, PA. Poster presentation.

Herzberg, O., **Rachwani, J.**, Kaplan, B.E., O'Grady, S.M., Comalli, D.M., & Adolph, K.E. (2017, November). *Flexibility in action: How infants and adults navigate under a barrier*. International Society for Developmental Psychobiology. Washington, DC. Poster presentation.

- Kaplan, B.E., **Rachwani, J.**, Tamis-LeMonda, C.S., & Adolph, K.E. (2017, November). *Hidden affordances in plain sight: Discovering possibilities for action with Duplo bricks*. International Society for Developmental Psychobiology. Washington, DC. Poster presentation.
- Rachwani, J.**, & Adolph, K.E. (2017, November). *Challenges to developmental research on sitting and reaching*. International Society for Developmental Psychobiology. Washington, DC. Poster presentation.
- Hoch, J., **Rachwani, J.**, & Adolph, K.E. (2017, April). *Why do infants move? Locomotor exploration is more random than destination directed*. Society for Research in Child Development. Austin, TX. Platform presentation.
- Rachwani, J.**, Golenia, L., Herzberg-Keller, O.E., Borenstein, H., De Velez, L.P., & Adolph, K.E. (2017, April). *Visual, manual, and postural coordination in the development of prehension*. Society for Research in Child Development. Austin, TX. Poster presentation.
- Santamaria, V., & **Rachwani, J.** (2016, November). *Evidencia científica e implicaciones terapéuticas del tronco en sedestación y durante las actividades de alcance y manipulación*. National Conference of the Spanish Society of Pediatric Physical Therapy. Seville, Spain. Invited Presentation.
- Hoch, J., **Rachwani, J.**, & Adolph, K.E. (2016, May). *Why do infants move? Locomotor exploration is not directed toward visible goals*. International Congress on Infant Studies. New Orleans, LA. Poster presentation.
- Rachwani, J.**, Soska, K.C., Hurwitz, L.B., & Adolph, K.E. (2016, May). *Infants' adaptation to a sloping Situation: Maintaining balance while sitting on a sloping surface*. International Congress on Infant Studies. New Orleans, LA. Poster presentation.
- Rachwani, J.**, Soska, K.C., von Hofsten, C., Rosander, K., & Adolph, K.E. (2016, May). *Infants plan prehension while pivoting*. International Congress on Infant Studies. New Orleans, LA. Poster presentation.
- Peterson, M., Santamaria, V., Burgos, P., & **Rachwani, J.** (2015, November). *Confiabilidad del análisis de los movimientos sin marcadores*. XIII Congreso Internacional Oritel. Jornadas Fundacionales de la Academia Latinoamericana de Desarrollo Infantil y Discapacidades. Asunción, Paraguay. Poster Presentation.
- Rachwani, J.**, Santamaria, V., Saavedra, S.L., & Woollacott, M.H. (2015, June). *The development of trunk control and its relation to reaching: A longitudinal study*. International Society for Posture and Gait Research. Seville, Spain. Platform presentation.

Santamaria, V., **Rachwani, J.**, Saavedra, S.L., & Woollacott, M.H. (2015, June). *The impact of segmental trunk support on posture and reaching in children with cerebral palsy: A kinematic and electromyographic study*. International Society for Posture and Gait Research. Seville, Spain. Poster presentation.

Santamaria, V., & **Rachwani, J.** (2014, April). *Segmental trunk acquisition and control: Implications in typical development and cerebral palsy*. Therapy in Educational Settings (TIES). Eugene, OR. Invited Presentation.

Santamaria, V., **Rachwani, J.**, Manselle, W., Saavedra, S.L., & Woollacott, M.H. (2014, November). *The impact of segmental trunk support on a reach-to-grasp task while sitting*. Society for Neuroscience. Washington DC, WA. Poster presentation.

**Rachwani, J.**, Santamaria, V., Saavedra, S.L., & Woollacott, M.H. (2014, July). *The development of trunk control and its relation to reaching: A longitudinal study*. The International Society on Infant Studies. Berlin, Germany. Poster presentation.

**Rachwani, J.**, Santamaria, V., Saavedra, S.L., Wood, S., Porter, F., & Woollacott, M.H. (2013, October) *Segmental trunk control acquisition and reaching in typically developing infants*. American Academy for Cerebral Palsy and Developmental Medicine. Milwaukee, WI. Poster presentation.

Santamaria, V., Riobos, A., Heredia, M., **Rachwani, J.**, de la Fuente, J., Criado, J., Nava, M., & Yajeya, J. (2012, October). *Motor recovery after a frontal cortex lesion in adult rats applying a short-term rehabilitation protocol in a critical period of time*. Society for Neuroscience. New Orleans, LA. Poster presentation.