

Amanda J. Arnold, Ph.D.

WORK ADDRESS

Mitchell Recreation & Athletic Center 251A, 200 Livingston Dr., Granville, OH 43023
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EDUCATION

2014 – 2019 **Purdue University**, West Lafayette, IN
Doctor of Philosophy, Health and Kinesiology
2012 – 2014 **Southern Illinois University**, Carbondale, IL
Master of Science in Education, Kinesiology
2008 – 2012 **Southern Illinois University**, Carbondale, IL
Bachelor of Science, Exercise Science
Coaching Minor

ACADEMIC APPOINTMENTS

2021 – Present **Assistant Professor**, Department of Health, Exercise, and Sport Studies
Denison University, Granville, OH
2020 – 2021 **Assistant Professor**, Department of Exercise Science
Ohio Dominican University, Columbus, OH
2019 – 2020 **Postdoctoral Researcher**, Department of Bioengineering
University of California Riverside, Riverside, CA

JOURNAL PUBLICATIONS

PEER-REVIEWED JOURNAL ARTICLES

1. **Arnold, A. J.**, Haworth, J. L., Moran, V. O., Abulhasan, A., Steinbuch, N., & Kokkoni, E. (2020). Exploring the unmet need for technology to promote motor ability in children under 5 years of age: a systematic review. *Archives of Rehabilitation Research and Clinical Translation*, 2(2), 1-12. DOI: 10.1016/j.arrct.2020.100051
2. Chagdes, J. R., Liddy, J. J., **Arnold, A. J.**, Claxton, L. J., & Haddad, J. M. (2020). A mathematical model to examine issues associated with using portable force-measurement technologies to collect infant postural data. *Journal of Motor Learning and Development*, 8(1), 14-37. DOI: 10.1123/jmld.2019.0009
3. **Arnold, A. J.**, Liddy, J. J., Harris, R. C., & Claxton, L. J. (2020). Task-specific adaptations of postural sway in infant sitting. *Developmental Psychobiology*, 62, 62-99. DOI: 10.1002/dev.21910
4. Liddy, J. J., **Arnold, A. J.**, Cho, H., Romine, N. L., Haddad, J. M. (2019). The effect of holding an object on postural stability and suprapostural task performance. *Journal of Applied Biomechanics*, 35(6), 418-425. DOI: 10.1123/jab.2019-0040
5. **Arnold, A. J.**, & Claxton, L. J. (2017). To drop or not to drop: Newly standing infants maintain hold of objects when experiencing a loss of balance. *Journal of Motor Learning and Development*, 5(2), 181-192. DOI: 10.1123/jmld.2016-0052

MANUSCRIPTS UNDER REVIEW

1. **Arnold, A. J.** & Claxton, L. J. (under review). *The impact of object carriage on walking abilities and language development in infancy.*

MANUSCRIPTS IN PREPARATION

1. Cho, H., Cui, C., Yang, Z., **Arnold, A. J.**, Becker, T., Kulkarni, A., Naik, A., & Rietdyk, S. (in prep). *An observational study of stair descent in young adults: Behavioral differences in males and females.*

2. St. John, J., Balbo, M., Picozzi, L., Martinez, D., & **Arnold, A. J.** (in prep). *Examining Focus of Attention in Collegiate-Level Breaststrokers.*

CONFERENCE PROCEEDINGS

PEER-REVIEWED CONFERENCE PAPERS

1. Sahin, I., Bashir, L., **Arnold, A. J.**, & Kokkoni, E. (August 2021). *Network analysis of an infant's motor actions performed in a robot-assisted learning environment.* Conference paper presented at IEEE International Conference on Robot & Human Interactive Communication (RO-MAN), Virtual Meeting.
2. Kokkoni, E., **Arnold, A. J.**, Baxevani, K., & Tanner, H. G. (March 2021). *Infants respond to robots' need for assistance in pursuing action-based goals.* Late-breaking conference paper presented at ACM/IEEE International Conference on Human-Robot Interaction, Virtual Meeting.

PEER-REVIEWED CONFERENCE PODIUM AND POSTER PRESENTATIONS (underline denotes undergraduate mentees)

1. Thompson, P. A., DeJoan, A.J., Shalit, E. C., Nicholson, O. G., **Arnold, A. J.**, Ambike, S., Claxton, L. J. (July 2022). *Impact of Toy Characteristics and Posture on Bimanual Object Interactions During Free-Play in Infants.* Poster presented at the International Congress of Infant Studies, Ottawa, Ontario, CA.
2. Cho, H., Cui, C., Yang, Z., **Arnold, A. J.**, Becker, T., Kulkarni, A., Naik, A., & Rietdyk, S. (July 2022). *Stair descent behavior in young adults: Females less likely to use handrails and more likely to engage in in-person conversations.* Poster presented at the International Society of Posture and Gait Research Congress, Montreal, Quebec, CA.
3. Thompson, P. A., Shalit, E. C., DeJoan, A.J., Kornelik, F.M., Nicholson, O. G., **Arnold, A. J.**, Ambike, S., Claxton, L. J. (May 2022). *Evidence of role differentiated bimanual manipulation in infants during free-play.* Podium presentation at the North American Society for the Psychology of Sport and Physical Activity Conference, Hawaii, HI.
4. Kokkoni, E., **Arnold, A. J.**, Galloway, J. C., Tanner, H. G. (October 2020). *Assistive effects of dynamic weight support on open-area mobility on infants with Down syndrome over time: a report of two cases.* Late-breaking poster presented at American Congress of Rehabilitation Medicine Annual Conference, Virtual Meetin.
5. **Arnold, A. J.**, Tasouli-Drakou, V., Galloway, J. C., Tanner, H. G., & Kokkoni, E. (June 2020). *User and caregiver acceptability of a novel pediatric mobility training combining socially assistive robots and body weight support technology.* Virtual presentation at the North American Society for the Psychology of Sport and Physical Activity Conference, Virtual Meeting.
3. **Arnold, A. J.**, Mestas, J., Fujimoto, N., Cristobal, J., Galloway, J. C., Tanner, H. G., & Kokkoni, E. (June 2020). *Combining the use of socially assistive robots and body weight support technology to encourage infants' participation in complex motor tasks.* Virtual presentation at the North American Society for the Psychology of Sport and Physical Activity Conference, Virtual Meeting.
4. Claxton, L. J., **Arnold, A. J.**, Stiens, M. J., & DeJoan, A. E. (June 2020). *Object transportation in crawling infants.* Virtual presentation at the North American Society for the Psychology of Sport and Physical Activity Conference, Virtual Meeting.
5. Claxton, L. J., **Arnold, A. J.**, Shalit, E. C., & Martin, K. A. (June 2020). *The relationship between carrying objects and falls in 13-month-old infants.* Virtual presentation at the North American Society for the Psychology of Sport and Physical Activity Conference, Virtual Meeting.
6. **Arnold, A. J.**, & Claxton, L. J. (June 2018). *Is toy carriage during walking related to language ability?* Poster presented at the International Congress of Infant Studies, Philadelphia, PA.
7. **Arnold, A. J.**, Rance, K. J., & Claxton, L. J. (June 2018). *Do infants and toddlers demonstrate a preference toward size or weight when selecting toys to carry during free-play?* Poster presented at the International Congress of Infant Studies, Philadelphia, PA.
8. Liddy, J. J., Rooney, L. J., Romine, N. L., Cho, H., **Arnold, A. J.**, Salsabili, H., Cui, C., & Haddad, J. M. (July 2017). *Does holding an object benefit the performance of a standing precision manual task?* Poster presented at the International Society for Posture and Gait Research Congress, Fort Lauderdale, FL.

9. **Arnold, A. J.**, Harris, R. C., Liddy, J. J., Schwichtenberg, A.J., & Claxton, L. J. (June 2017). *Sitting postural sway in 12-month-old infants at low and high risk for autism spectrum disorder*. Podium presentation at the North American Society for the Psychology of Sport and Physical Activity Conference, San Diego, CA.
10. Liddy, J. J., Chagdes, J. R., **Arnold, A. J.**, Claxton, L. J., & Haddad, J. M. (June 2016). *Postural sway inaccuracies using the Wii Balance Board: A mathematical description*. Podium presentation at the North American Society for the Psychology of Sport and Physical Activity Conference, Montreal, Quebec, CA.
11. **Arnold, A. J.**, Harris, R. C., Liddy, J. J., Schwichtenberg, A.J., & Claxton, L. J. (May 2016). *Impact of surface stability on sitting postural sway in 15-month-old infants at low- and high-risk of ASD*. Poster presented at the International Congress of Infant Studies, New Orleans, LA.
12. **Arnold, A. J.**, Collignon, A., Gaona, P., Sheets, R., Smith, S., & Claxton, L. J. (June 2015). *Evidence of object prioritization in infancy*. Podium presentation at the North American Society for the Psychology of Sport and Physical Activity Conference, Portland, OR.
13. **Arnold, A. J.**, Collignon, A., Gaona, P., Sheets, R., Smith, S., & Claxton, L. J. (June 2015). *The impact of holding a toy on arm guard position in newly standing infants*. Podium presentation at the North American Society for the Psychology of Sport and Physical Activity Conference, Portland, OR.
14. **Arnold, A. J.**, Harris, R. C., Liddy, J. J., & Claxton, L. J. (June 2015). *Postural sway of sitting infants on solid and foam surfaces while engaged in concurrent tasks*. Poster presented at the North American Society for the Psychology of Sport and Physical Activity Conference, Portland, OR.

INVITED RESEARCH TALKS

1. **Arnold, A. J.** (September 2020). *Baby, let's get moving: the importance of postural control and mobility early in development*. St. Albert STEM Club Meeting, Ohio Dominican University, Columbus, OH.
2. **Arnold, A. J.** (May 2018). *Environmental and task effects on postural control in infancy*. Departmental Conference, Departamento del Movimiento Corporal Humano, Universidad Nacional de Colombia, Bogotá, COL.
3. **Arnold, A. J.** (May 2018). *The effects of carrying an object on walking abilities and language development*. Executive Functions and Child Development: International Seminar, Departamento del Movimiento Corporal Humano, Universidad Nacional de Colombia, Bogotá, COL.
4. **Arnold, A. J.** (March 2017). *The effects of surface on postural sway in infants at low and high risk of ASD*. Departmental Colloquium, Department of Health and Kinesiology, Purdue University, West Lafayette, IN.

FUNDING

INTERNAL FELLOWSHIPS

2017-2018	Purdue Research Foundation Fellowship, Purdue University. <i>The relationship of object carriage, walking characteristics, and language development</i> , \$29,130.
2016-2017	Purdue Research Foundation Fellowship, Purdue University. <i>The impact of carrying differently sized and weighted objects on infants' walking ability</i> , \$29,130.
Summer 2016	Summer Purdue Research Foundation Fellowship, Purdue University, \$5,663.
2014- 2015	Ross Fellowship, Purdue University, \$27,895.

AWARDS & HONORS

2019	AKA Doctoral Scholar Award, American Kinesiology Association
2018	Carol J. Widule Award for Outstanding Scholarship (PhD), Purdue University

TEACHING EXPERIENCE

INSTRUCTOR OF RECORD

Denison University, Granville, OH
 HESS 201: Fundamentals of Health and Exercise
 HESS 203: Research Methods
 HESS 304: Kinesiology
 HESS 350: Practicum (Senior Year Experience)
 HESS 405: Health Behavioral Theory

HESS 426: Motor Learning and Control

Ohio Dominican University, Columbus, OH

EXSC 370: Biomechanics

BIO 341: Human Anatomy

BIO 342: Human Physiology

Purdue University, West Lafayette, IN

PES 111: Lifetime Fitness

Southern Illinois University, Carbondale, IL

KIN 101: Current Concepts of Physical Fitness

KIN 106D: Volleyball

LAB INSTRUCTOR

Purdue University, West Lafayette, IN

HK 253: Motor Development

Southern Illinois University, Carbondale, IL

KIN 320: Exercise Physiology

INVITED GUEST LECTURES

1. **Arnold, A. J.** (November 2017). *The effects of surface on postural sway in infants at low and high risk of ASD.* HK 453: Motor Coordination and Development, Department of Health and Kinesiology, Purdue University.
2. **Arnold, A. J.** (April 2017). *Sitting postural sway in 12-month-old infants at low and high risk of autism spectrum disorder.* HK 453: Motor Coordination and Development, Department of Health and Kinesiology, Purdue University.

MENTORING EXPERIENCE

TOTAL UNDERGRADUATE STUDENTS MENTORED: 57

Purdue University (Motor Development Lab): 38 students

University of California Riverside (Pediatric Rehabilitation Technology Lab): 12 students

Ohio Dominican University: 1 student

Denison University (Motor Development Lab): 6 students

PROFESSIONAL AFFILIATIONS

2021 – Present

International Motor Development Research Consortium

2021 – Present

Society for Transparency, Openness, and Replication in Kinesiology

2015 – Present

International Congress of Infant Studies

2014 – Present

North American Society for the Psychology of Sport and Physical Activity

2018

Society for Research in Child Development

SERVICE

PROFESSIONAL

2022

Motor Development Conference Planning Committee, 2022 North American Society for the Psychology of Sport and Physical Activity Conference.

2021

Conference Abstract Reviewer, 2022 International Congress of Infant Studies Conference, Motor and Sensorimotor Processes Panel.

2021

Conference Paper Reviewer, 30th IEEE International Conference on Robot & Human Interactive Communication (RO-MAN).

2018

Conference Abstract Reviewer as Mentor-Mentee Review Pair (with Dr. Claxton), 2019 Society of Research and Child Development Conference.

- 2018 **Graduate Student Volunteer**, 2018 International Congress of Infant Studies Conference, Philadelphia, PA.
- 2018 **Motor Development Session Poster Moderator**, 2018 North American Society for the Psychology of Sport and Physical Activity Conference, Denver, CO.

UNIVERSITY

- 2022 – Present **Body Positive Denison Facilitator** (licensed via The Body Positive Institute), Wellness Center, Denison University.
- 2022 – Present **Social Sciences Representative**, Faculty Development Committee, Denison University.
- 2022 **June-O Faculty Advisor**, Office of First-Year Experience, Denison University.
- 2020 – 2021 **Faculty Representative**, Academic Standing Committee, Ohio Dominican University.
- 2016 – 2017 **Graduate Student Representative**, College of Health and Human Sciences Grade Appeal Committee, Purdue University.

DEPARTMENTAL

- 2022 – Present **Graduate School & Professional Development Coordinator**, Health, Exercise, & Sport Studies, Denison University.
- 2021 – 2022 **Journal Club Coordinator**, Health, Exercise, & Sport Studies, Denison University.

COMPUTER & SOFTWARE SKILLS

MATLAB, DataVyu, SPSS, SAS, VICON Motion Capture, Phoenix Motion Capture, AMTI Force Plate, BTrackS Force Plate, Kinovea, Delsys Trigno Sensors

CV updated July 2022