



TEMPLE GRANDIN
EQUINE CENTER
COLORADO STATE UNIVERSITY

Three Tracks of Research:
Funding, Publications, and Presentations, 2013-2020

Submitted by Wendy Wood, Director of Research

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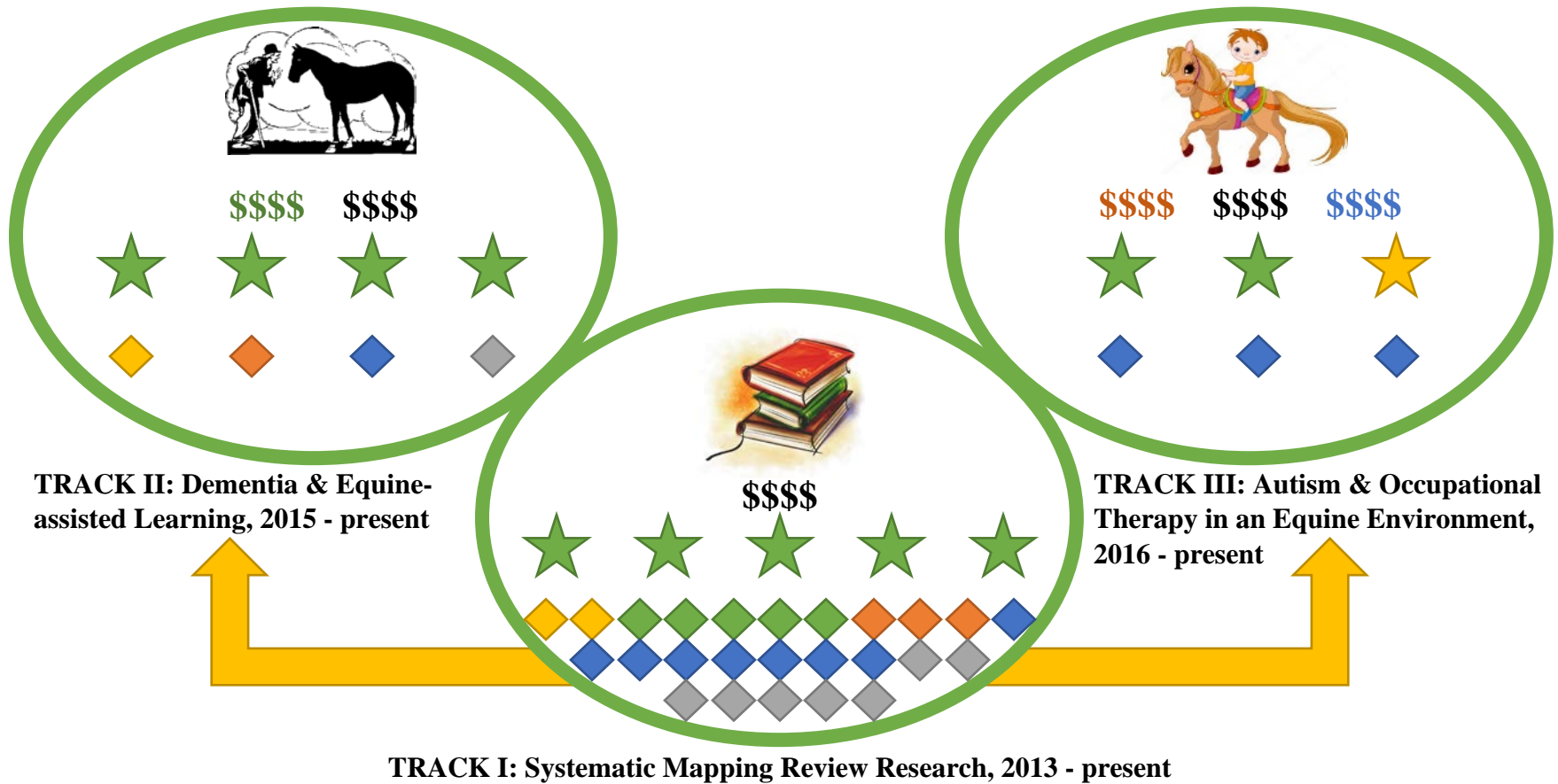


Figure. TGEC Tracks of Research: Funding, Publications, Presentations, 2013-present

Funding	Peer-reviewed Publications	Research Presentations & Posters
\$\$\$\$ Catalysts for Innovation Partnerships	★ Peer-reviewed publication	◆ Keynote/honorary address
\$\$\$\$ Horses & Humans Research Foundation	★ Manuscript under review/development	◆ Invited research presentations
\$\$\$\$ Carl and Caroline Swanson Foundation		◆ International poster/paper presentation
\$\$\$\$ CSU Human-animal Interaction		◆ National poster/paper presentation
		◆ State/Local poster/paper presentation

Track I. Systematic Mapping Reviews (SMR) of Peer-reviewed Literature of Equine-assisted Activities and Therapies



SMR: FUNDING

The Carl and Caroline Swanson Foundation has supported our systematic mapping reviews through its financial support of the TGEC Director's salary and of graduate research assistantships for MS students in occupational therapy and PhD students in Occupation and Rehabilitation Science.

SMR: PUBLISHED WORKS

Refereed Journal Articles

- 1) Wood, W., & Fields, B. (2019). Hippotherapy: A systematic mapping review of peer-reviewed research, 1980 to 2015. *Disability and Rehabilitation*, DOI:10.1080/09638288.2019.1653997
- 2) Kinney, A. R., Eakman, A. M., Lassell, R. & Wood, W. (2019). Equine-assisted interventions for veterans with service-related health conditions: a systematic mapping review. *Military Medical Research* 6(1), 28, DOI: 10.1186/s40779-019-0217-6.
- 3) Peters, B. C., Hepburn, S. & Wood, W. (2019). Theoretical development of equine-assisted activities and therapies for children with autism: A systematic mapping review. *Bulletin of Human-Animal Interaction* 8(2).
- 4) Wood, W., Fields, B., Rose, M. & McLure, M. (2017). Animal-assisted therapies and dementia: A systematic mapping review using the Lived Environment Life Quality (LELQ) Model. *American Journal of Occupational Therapy*. <https://doi.org/10.5014/ajot.2017.027219>
- 5) McDaniel-Peters, B. C., Wood, W. (2017). Autism and equine-assisted interventions: A systematic mapping review. *Journal of Autism and Developmental Disabilities*. DOI: 10.1007/s10803-017-3219-9

SMR-ORAL PRESENTATIONS

Keynote/Honorary Addresses

- 1) Wood, W. (2016, October). Keynote Address—*Nature-enriched occupational therapy, imagine!* 13th Annual Barbara A. Rider Colloquium, Western Michigan University, Kalamazoo, MI. (Note: Wendy drew heavily from the SMR for this address)
- 2) Wood, W. (2015, March). Keynote Address—*Strengthening evidence-based practices of hippotherapy through strategic practice and research partnerships*. Presented to the annual meeting of the American Hippotherapy Association, Fort Worth, TX.

Invited Presentations

- 1) Wood, W. (2017, August). Invited panelist—Introduction to equine-assisted activities and therapies and supporting research. Presented to *Taking the Reins: Exploring Equine-assisted Activities & Therapies for Today's Veterans*, a High Impact Collaboration of the Bob Woodruff Foundation. Silver Bay, NY.
- 2) Wood, W. (2017, June). Invited panelist—Researchers' panel. Presented to 2017 Annual Meeting of the American Horse Council. Washington, DC.
- 3) Wood, W. (2017, May). Invited Research Paper—A systematic mapping review of equine-assisted activities and therapies: 1980-2015. Presented to the Board of Directors, Professional Association of Therapeutic Horsemanship, International. Denver, Colorado.
- 4) Wood, W., McDaniel, B.C., Hoesly, B. (2016, November). Invited Research Paper—*What 34 years of refereed papers on equine-assisted activities and therapies (may) suggest about future research directions*. Presented at a 1 day research workshop held during the annual meeting of the Professional Association of Therapeutic Horsemanship, International. Williamsburg, VA.
- 5) Wood, W. & Hoesly, B. (2016, September). Invited Research Paper—*Hippotherapy: Current knowledge, evidence and implications for occupational therapy*. Presented to the annual meeting of the New Mexico Occupational Therapy Association, Albuquerque, NM.

International Refereed Presentations

- 1) Wood, W., & Fields, B. (2018, May). *Therapeutic incorporation of horses by occupational therapists: A systematic mapping review of international refereed literature published over 35 years, 1980 through 2015*. Conference of the World Federation of Occupational Therapy, Cape Town, South Africa.
- 2) Hoesly, B.,* McDaniel, B.C.,* Rose, M.,* Flinkstrom, R.* & Wood, W. (2015, November). *A systematic mapping review study of therapeutic riding* (research paper). Annual International Meeting of the Professional Association of Therapeutic Horsemanship, International, Cleveland, OH.
- 3) McDaniel, B.C.* & Wood, W. (2015, November). *A systematic mapping review of literature pertaining to equine-assisted activities and therapies for children with autism* (research poster). Annual International Meeting of the Professional Association of Therapeutic Horsemanship, International, Cleveland, OH.

National Refereed Presentations

- 1) Wood, W., Fields, B. & Lassell, R. (2019, April). *Incorporating horses in occupational therapy: Past practices and future directions informed by a systematic mapping review of international research* (research poster). Annual conference of the American Occupational Therapy Association, New Orleans, LA.
- 2) Wood, W. & Fields, B. (2019, April). *Current state of scientific evidence on hippotherapy: Past practices and future directions informed by a systematic mapping review of international research* (research paper). Biannual conference of the American Hippotherapy Association, Lexington, KY.

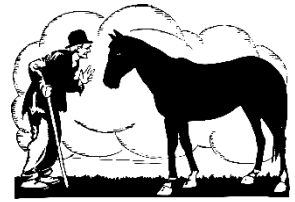
- 3) Wood, W. & Fields, B. (2017, October). *The shredding and reconstituting of complex healing occupations involving horses* (research paper). 16th Annual Research Conference of the Society for the Study of Occupation: USA. Seattle, WA.
- 4) McDaniel, C. & Wood, W. (2017, March). *Evidence supporting the incorporation of horses and the equine environment for children and adolescents with autism*. Biannual meeting of the American Hippotherapy Association, Fort Collins, CO.
- 5) Hoesly, B. E., McDaniel, B., Osmann, E., Hardie, R. F., Rose, M. R., & Wood, W. (2016, April). *A 34-year systematic mapping review of refereed publications on hippotherapy* (research poster). Annual Conference of the American Occupational Therapy Association, Chicago, IL.
- 6) McDaniel, B. C., Osmann, E. L., & Wood, W. (2015, October). A systematic mapping review of equine-assisted activities and therapies for children with autism: Implications for occupational therapy (research paper). 14th Annual Research Conference of the Society for the Study of Occupation: USA. Ft. Lauderdale, FL.
- 7) Hoesly, B., Osmann, E., McDaniel, B., Flinkstrom, R., Rose, M. & Wood, W. (2015, March). *A systematic mapping review of peer-reviewed publications on equine-assisted activities and therapies, 1980 – 2014* (research paper). Biannual Conference of the American Hippotherapy Association, Fort Worth, TX.
- 8) Wood, W., McDaniel, B.* & Osmann, E.* (2014, August). *A systematic mapping review of equine-assisted activities and therapies* (research paper). Annual Conference of Uniting Higher Education and Equine Assisted Activities and Therapies, Murfreesboro, TN.

State/Regional/Local Presentations

- 1) Lassell, R., Fields, B., Busselman, S., Hempel, T., & Wood, W. (2018, November). *A logic model of a dementia-specific program of equine-assisted activities*. Poster session presented at the Graduate Student Showcase at Colorado State University, Fort Collins, CO.
- 2) Hoesly, B., Osmann, E., McDaniel, C., Rose, M., Hardie, R., & Wood, W. (2016, May). A 34-year systematic mapping review of hippotherapy: Implications for occupational therapy. Poster presentation at: The Fifteenth Annual Knowledge Exchange. Department of Occupational Therapy at Colorado State University, Fort Collins, CO.
- 3) Hoesly, B., Osmann, E., McDaniel, C., Hardie, R., Rose, M., & Wood, W. (2016). A 34-year systematic mapping review of refereed publications on hippotherapy. Core Connection Course for the American Hippotherapy Association, Fort Collins, CO.
- 4) McDaniel, B.C.,* Osmann, E.,* Hoesly, B.,* Hardie, R.,* Rose, M.,* & Wood, W. (2016, October). A 34-year systematic mapping review of literature pertaining to equine-assisted activities and therapies for children and adolescents with autism: Implications for occupational therapy (research poster). Annual conference of the Occupational Therapy Association, Colorado, Blackhawk, CO.
- 5) Hoesly, B., Osmann, E., McDaniel, C., Rose, M., & Hardie, R., Wood, W. (2015, October). *An in-progress systematic mapping review of hippotherapy* (research poster). Annual Conference for the Occupational Therapy Association of Colorado, Thornton, CO.

- 6) Hoesly, B., Osmann, E., McDaniel, C., Rose, M., Flinkstrom, R., & Wood, W. (2015). An in-progress systematic mapping review of equine-assisted activities and therapies. Poster presentation at: Colorado State University Graduate Student Showcase, Fort Collins, CO.
- 7) Hoesly, B., Osmann, E., McDaniel, C., Rose, M., Hardie, R., & Wood, W. (2015). An in-progress systematic mapping review of hippotherapy: Implications for occupational therapy research. Poster presentation at: The Fourteenth Annual Knowledge Exchange at Colorado State University, Fort Collins, CO.

Track II. The Study of a Program of Equine-assisted Learning for Older Adults with Dementia



Dementia: CURRENT RESEARCH

A phase 2 study of equine-assisted learning for older adults with dementia is currently underway. Building upon promising Phase 1 findings, the current study is investigating the feasibility, acceptability, and preliminary efficacy of the equine-assisted learning program in comparison to a nature-based control group.

Dementia: FUNDING

The Carl and Caroline Swanson Foundation has supported this track of research through its financial support of the TGENC Director's salary and of graduate research assistantships for MS students in occupational therapy and PhD students in Occupation and Rehabilitation Science. In addition, we have obtained funding through this following mechanism.

Internally-Funded Project

2017-2019 Enriched environments for the healthy, aging brain. D. Devalos, PI; W. Wood Co-PI. Catalyst for Innovative Partnerships, Office of the Vice President of Research, Colorado State University, \$200,000.

Dementia: HONORS & AWARDS

- 2018 "Excellence in Research and Scholarship Award" conferred upon Rebecca Lassell, Beth Fields, Sarah Busselman, Tauren Hempel & Wendy Wood by the College of Health and Human Sciences for the poster, *A logic model of a dementia-specific program of equine-assisted activities*, presented at the Graduate Student Showcase at Colorado State University, Fort Collins, CO.
- 2018 "2018 Golden Quill Award" conferred upon Wendy Wood, Jenna Lampe, Amy Metcalfe, Christina Alvord and Beth Hoesly by the Board of Directors of the Canadian Association of Occupational Therapists for the manuscript, *The Lived Environment Life Quality Model for Institutionalized People with Dementia*. Note: this paper presented the dementia-specific conceptual practice model that has guided our study of the EAAP for people with dementia

Dementia: PUBLISHED WORKS

Invited Article

- 1) Wood, W. (2018). Envisioning the environment, time and occupation. *Journal of Occupational Science* 1-14. Note: Wendy drew heavily upon our research findings of a program of equine-assisted learning for people with dementia in this honorary lecture.

Refereed Journal Article

- 1) Lassell, R., Fields, B., Busselman, S., Hempel, T., & Wood, W. (2020). A logic model of a dementia-specific equine-assisted activities program. *Human-Animal Interaction Bulletin*, 9(2).
- 2) Fields, B., Lassell, R., & Wood, W. (2019). Impact of a dementia-specific equine-assisted activities program: Perspectives of providers. *Quality in Ageing and Older Adults*. DOI: 10.1108/QAOA-10-2018-0047
- 3) Fields, B., Bruemmer, J., Gloeckner, G. & Wood, W. (2018). Influence of an equine-assisted program on dementia-specific quality of life. *American Journal of Alzheimer's Disease and Other Dementias*, 33(5), 309-317. DOI: 10.1177/1533317518772052

Dementia: ORAL PRESENTATIONS & POSTERS

Keynote/Honorary Address

- Wood, W. (2018, October). 2018 Ruth Zemke Lectureship in Occupational Science—The environment, time, and occupation. Presented to the annual meeting of the Society for the Study of Occupation: USA, Lexington, KY. Note: Wendy drew heavily upon our research findings of the EAAP for people with dementia in this honorary lecture.

International Refereed Presentations

- Fields, B. (2018, May). *Riding in the moment: Exploring the influence of an equine-assisted intervention on the quality of life of institutionalized adults with dementia*. Conference of the World Federation of Occupational Therapy, Cape Town, South Africa.

National Refereed Presentations

- Fields, B. & Wood, W. (2017, October). *Exploring the influence of an equine-assisted intervention on the quality of life of institutionalized adults with dementia* (research poster). 16th Annual Research Conference of the Society for the Study of Occupation: USA. Seattle, WA.

State/Regional/Local Presentations

- 1) Lassell, R., Fields, B., Busselman, S., Hempel, T., & Wood, W. (2018, November). *A logic model of a dementia-specific program of equine-assisted activities*. Poster session presented at the Graduate Student Showcase at Colorado State University, Fort Collins, CO.

Track III: Occupational Therapy in an Equine Environment for Children with Autism Spectrum Disorder



Autism: CURRENT RESEARCH

A phase 2 study of occupational therapy in an equine environment for children with autism is currently underway. Building upon promising Phase 1 findings, the current study is investigating the feasibility, acceptability, and preliminary efficacy of the manualized intervention in comparison to a nature-based control group.

Autism: FUNDING

The Carl and Caroline Swanson Foundation has supported this track of research through its financial support of the TGEC Director's salary and of graduate research assistantships for MS students in occupational therapy and PhD students in Occupation and Rehabilitation Science. In addition, we have obtained funding through this following mechanism:

Externally-Funded Project

- 2018 – 2020 Feasibility, acceptability, and preliminary efficacy of a manualized equine-assisted occupational therapy intervention for children with autism. Horses and Humans Research Foundation, \$49,999. (B. Caitlin Peters, PI; W. Wood, Co-PI).
- 2020 – 2022 Piloting an Enhanced Protocol to Evaluate Occupational Therapy in an Equine Environment for Youth with Autism. Colorado State University Pilot Funding for Innovative Research in Human-animal Interactions for Health and Mental Health, \$47,916. (B. Caitlin Peters and Wendy Wood, Investigators).

Autism: PUBLISHED WORKS

Refereed Journal Articles

- 1) Peters, B. C., Wood, W., Hepburn, S. & Bundy, A. (2020). Pilot study: Occupational therapy in an equine environment for youth with autism. *OTJR: Occupation, Participation, and Health*. DOI: 10.1177/1539449220912723
- 2) Kalmbach, D., Wood, W., & Peters, B.C. (2020). Parental perspectives of occupational therapy in an equine environment for children with autism. *Occupational Therapy in Health Care*. DOI: 10.1080/07380577.2020.1751903

Manuscripts Under Review

- 1) Bentele, C., Wood, W.W., & Peters, B.C. (In Review). Occupational therapy in an equine environment for children with autism spectrum disorder: A transactional perspective of occupational situations.

Autism: ORAL PRESENTATIONS & POSTERS

National Refereed Presentations

- 1) Peters, B.C., & Wood, W. (2019, April). *OT in an Equine Environment for Children with Autism: A Multiple Baseline Single-Case Experimental Design*. American Occupational Therapy Association Annual Conference, New Orleans, LA.
- 2) Peters, B.C., & Wood, W. (2019, March). *Occupational Therapy Incorporating Hippotherapy and Other Treatment Techniques for Children with Autism: A Multiple-baseline Single Case Experimental Design*. Biennial Conference of the American Hippotherapy Association, Lexington, KY.
- 3) Bentele, C., Peters, B.C., & Wood, W. (2018, October). *Occupational Therapy in an Equine Environment for Children with Autism: A Transactional Case Study*. Fourteenth Annual Research Conference of the Society for the Study of Occupation: USA, Lexington, KY.