

# CURRICUUM VITAE

## VIRGIL MATHIOWETZ, PhD, OTR/L, FAOTA

### PROFESSIONAL ADDRESS

Program in Occupational Therapy  
 Center for Allied Health Programs  
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### IDENTIFYING INFORMATION

#### Education

Degree	Institution	Date Degree Granted
B.S.	University of Minnesota Occupational Therapy	1974
M.S.	Boston University Occupational Therapy (Education & Advanced Physical Disabilities)	1981
Ph.D. [Dr. Michael Wade]	University of Minnesota Kinesiology (Motor Behavior)	1991

#### Certifications, Licenses

Certifications: OTR through NBCOT 1974 through March 31, 2021.  
 Licensure: Minnesota through February 29, 2020.

#### Academic Appointments

<i>University of Minnesota, Twin Cities Campus</i> Current rank (associate professor)	<i>1996 - present</i> 1996 - present
<i>College of St. Catherine</i> Previous rank (associate professor)	<i>1985-1996</i> 1985-1996
<i>University of Wisconsin – Milwaukee</i> Previous rank (assistant professor)	<i>1981-1985</i> 1981-1985

#### Academic Administrative Appointments

<i>University of Minnesota Twin Cities Campus: Program in Occupational Therapy</i> Director	2005-2006
Assistant Director	2006-2016
<i>College of St. Catherine, Department of Occupational Therapy</i> Chair	1995-1996

### **Clinical/Hospital Appointments**

Staff OT Position in Adult Physical Disabilities  
University of Minnesota Hospitals, Minneapolis, MN 1976-1980

Staff OT Position in Physical Disabilities  
Mayo Clinic (St. Mary's Hospital), Rochester, MN 1974-1976

### **Consulting Positions**

Intelligent Health, Ltd., Carefree, AZ: Scientific advisor to determine feasibility of using Mind/Body Dream Machine (MBDM) for persons with disabilities. The MBDM uses virtual reality and robotic technologies to provide fitness/wellness evaluation, and strength, flexibility, cardiovascular, and relaxation exercises. 2001-2005

Smith & Nephew Rolyan Inc., Menomonee Falls, WI: Research consultant for a study comparing the Rolyan to the Jamar dynamometer (inter-instrument reliability study). 1999-2000

Sister Kenny Institute, Minneapolis, MN: Research consultant for a study on the effects of a soft wrist-hand resting splint on the pain and inflammation of persons with rheumatoid arthritis. 1992-1995

Smith & Nephew Rolyan Inc., Menomonee Falls, WI: Research consultant for a study comparing the R.E.A.D. system (computerized hand assessment system) to the Jamar dynamometer and the B & L Engineering pinch gauge (inter-instrument reliability study). 1992

Honeywell, Golden Valley, MN: Research consultant for the 'Technologies for the Disabled' project, which is developing Human Factors Design Guidelines for the Disabled and Elderly as it applies to consumer products found in the home environment. 1989-1991

Geriatric Environmental Concepts, New Brighton, MN: Research consultant on the development of a Low-technology Matching Inventory and assisted in writing a \$50,000 Small Business Grant, which was funded to support its development. 1987-1988

3M: Orthopedic Products, St. Paul, MN Research consultant for a clinical study on the effectiveness of a finger joint prosthesis designed for persons with rheumatoid arthritis. 1987-1988

American Medical International, Inc., Atlanta, GA: Occupational Therapy member of an inter-disciplinary rehabilitation team which was responsible for developing a comprehensive functional and component skills measurement tool for a CVA and Head Injury Program. 1986

### **Current Membership and Offices in Professional Organizations**

American Occupational Therapy Association, 1972 - present. Membership #311316

World Federation of Occupational Therapy, 1984 – present

Minnesota Occupational Therapy Association, 1972 – 1981 and 1985 – present

American Society of Hand Therapist, Associate member, 1992 - present.

North American Society for the Psychology of Sport and Physical Activity, 1991 - 1997.

Wisconsin Occupational Therapy Association, 1981-1985.

Minn-Dak Council on Occupational Therapy Education, 1985 - 1996

Wisconsin Council on Occupational Therapy Education, 1981-1985.

Arthritis Foundation, National AHPA, 1982- 1996.

Arthritis Foundation, Wisconsin Chapter, 1981 - 1985.

Professional Education Committee, 1983-1985.

Neurodevelopmental Treatment Association, 1981 - 1987.

## **HONORS AND AWARDS FOR RESEARCH WORK, TEACHING, PUBLIC ENGAGEMENT, AND SERVICE**

### **University of Minnesota**

#### **External Sources**

Inducted into the *AOTF Leaders & Legacy Society* for sustained service and contributions to AOTF. 2015

MOTA Communication Award for special skills and/or knowledge with the use of written and/or oral communication techniques in service to MOTA. Awarded by Minnesota Occupational Therapy Association. 2014

My reliability and validity of hand strength evaluations article (Mathiowetz, V., Weber, K., Volland, G., & Kashman, N., 1984) was the #1 ranked top-cited article in hand surgery journals.

Source: Joyce, C. W., Kelly J. C., & Carroll, S. M. (2013). The 100 top-cited classic papers in hand surgery. *Journal of Plastic Surgery & Hand Surgery, Early Online*, 1-7.

My grip and pinch strength normative data article (Mathiowetz et al., 1985), was reported by Shadgan, B., et al. (2010) as the 5<sup>th</sup> most cited article out of 45,700 articles published in 30 rehabilitation journals since 1959. 2010

Source: Shadgan, B., et al. (2010). Top-cited articles in rehabilitation. *Archives of Physical Medicine and Rehabilitation*, 91, 806-815.

*Labe Scheinberg Award* for best platform presentation, *RCT of an Energy Conservation Course for Persons with MS*, at 2004 Consortium of Multiple Sclerosis Center (CMSC) international conference, Toronto, Canada. 2004

*AOTF Academy of Research* for exemplary and distinguished contributions toward the science of occupational therapy. The 28<sup>th</sup> person to be inducted. Awarded by American Occupational Therapy Foundation. 2002

*Fellow of the American Occupational Therapy Association (FAOTA)* for contributions to the profession through research, publications, and presentations. Awarded by American Occupational Therapy Association. 1993

*Research Award* in recognition of contributions to the research and scientific base in occupational therapy. Awarded by Minnesota Occupational Therapy Association. 1989

*Minnesota Occupational Therapist of the Year* in recognition of contributions to the scientific base of knowledge in Occupational Therapy. Awarded by Minnesota Occupational Therapy Association. 1988

*Occupational Therapist of-the-Year* in recognition of efforts towards the advancement of the profession and contributions to practice. Awarded by SE District of Wisconsin 1984

*Certificate of Appreciation* for advancement of professional knowledge through research and presentations at National and State Conferences. Awarded by SE District of Wisconsin Occupational Therapy Association. 1984

## RESEARCH AND SCHOLARSHIP

### Grants and Contracts

**External Sources (federal {NIH, NSF, DEO, etc.} or state grants, foundation awards, nationally competitive, etc.)**

#### Current Grants

#2

*Role:* Co-investigator and TC Site Coordinator

*Name of PI:* Matt Plow, PhD:

*Grant Number:* MS-1610-37015

*External Granting Agency:* Patient-Centered Outcomes Research Institute (PCORI)

*Grant Title:* Comparing the Effectiveness of Fatigue Management Programs for People with MS

*Project Dates:* Feb 1, 2018 to Jan 31, 2022

*Direct Costs UMN site per year:* Y1: \$80,956; Y2: \$110,507; Y3: 113,522; Y4: \$90,520;

Total: \$395,505; Indirect Costs: Total: \$158,202; **TOTAL AWARD: \$553,707**

*% Effort/Salary Support:* 20% for co-PI plus two 50% time RA positions

#### Past Grants (Principal Investigator except where noted)

15. Care Providers of Minnesota, \$25,000 for 4 year study, *Efficacy of a Forearm Rotation Orthosis for Persons with a Hemiparetic Arm, 2014-2018.*  
Advisor to Chih-Yuan Yu, Principal Investigator.
14. Care Providers of Minnesota, \$22,490 for a two-year study, *Effects of OT Task-Oriented Approach in Upper Extremity Post-Stroke Rehabilitation.* 2009-2011.  
Advisor to Khader Al Mhdawi, principal investigator.
13. Serono, Inc., \$287,597 for a two year grant, *Mindfulness-Based Energy Conservation Strategies for Persons with Multiple Sclerosis and Fatigue: A Pilot Study, 2007-2009*
12. National Multiple Sclerosis Society, \$44,000 for a one-year pilot grant, *Effects of a home-based aerobic exercise for persons with multiple sclerosis, 2005-2006.*
11. National Multiple Sclerosis Society, \$268,000 for a 3-year randomized clinical trial, *Effects of an Energy Conservation Course for Persons with Multiple Sclerosis, 2001-2004.*
10. American Occupational Therapy Foundation, \$30,000 for the study, *Effects of an Energy Conservation Course for Persons with Multiple Sclerosis, 1998-2000.*

**Past Grants**

9. Bush Faculty Development Fund, College of St. Catherine, \$800 for the research project, *Effectiveness of Occupational Therapy on the Self-Care Ability of Individuals with Multiple Sclerosis*, 1994-95.
8. Fabrication Enterprises Inc., \$5,000 for the study, *Comparison of Baseline instruments to the Jamar dynamometer and the B & L Engineering pinch gauge*, 1992.
7. American Occupational Therapy Foundation Doctoral Fellowship, \$20,000 for the dissertation project, *Effects of Affordances on the Performance of Functional Tasks*, 1990-1991.
6. Bush Faculty Development Fund, College of St. Catherine, \$620 for the research project, *Effect of Fatigue on Hand Strength Measurements*, 1987.
5. Midwest Arthritis Treatment Center, Columbia Hospital, Milwaukee, WI, \$7,125 for the videotape, *Rheumatoid Arthritis: Occupational Therapy Evaluation and Treatment Planning*. The videotape is a tool designed to teach treatment planning skills to OT students and
4. Rolyan, Inc. and Wisconsin Department of Development, \$1600 for the research project, *The Relationship of Muscle Tone to Other Structural and Functional Assessments*, 1984. (J. J. McPherson, principal investigator)
3. University of Wisconsin-Milwaukee, Graduate School Research Committee, \$4,000 for the research project, *Clinical Norms for Hand Strength and Dexterity*, 1983-1984.
2. American Occupational Therapy Foundation, \$1,280 for the research project, *Clinical Norms for Hand Strength and Dexterity*, 1983.
1. Sargent College Research Fund, Boston, MA, \$85.00 for the research project, *Immediate Effect of Positioning Devices on the Normal and Spastic Hand as Measured by EMG*, 1981.
3. Minnesota Medical Foundation, \$12,800 for a two-year equipment grant, *Required Hand Grip Forces for Successful Manual Task Performance among Older Women with Hand Arthritis*, 2009-2011. In collaboration with C. McGee and D. Nuckley.
2. Grant-in-Aid of Research, U of MN Graduate School, \$25,811 for the study, *Stroke Rehabilitation: Task-oriented versus Neurodevelopmental Treatment*, 1999-2002.
1. Minnesota Medical Foundation, University of Minnesota, \$4,000 for the study, *Effects of an Energy Conservation Course for Persons with Multiple Sclerosis*, 1997-98.

**Revenue from Sales, Licensing, Consulting, or Clinical Practice.**

Online Continuing Education: tbd

## Publications

### Peer-Reviewed Publications

53. Emmons, T., Felts, J., Peterson, E., & **Mathiowetz, V. G.** (in press). Effects of meditative movements on the symptoms of persons with chronic health conditions. *Annals of International Occupational Therapy*,
52. Ellingson, A. M., McGee, C., Nuckley, D. J., Ferkul, M., & **Mathiowetz, V. G.** (2017). Development, construct validity and reproducibility of a mimetic sealed jar measuring the dynamics of opening. *Journal of Rehabilitation and Assistive Technologies Engineering*, 4, 1-6. DOI:10.1177/205566831769222.
51. Almhdawi, K., **Mathiowetz, V.**, Al-Hourani, Z, Khader, Y., Kanaan, S. F., & Alhasan, M. (2017). Musculoskeletal pain symptoms among allied health professions' students: Prevalence rates and associated factors. *Journal of Back and Musculoskeletal Rehabilitation*, 30, 1291-1301. DOI: 10.3233/BMR-169669
50. Van Heest, K. N, Mogush, A. R., & **Mathiowetz, V.** (2017). Effects of one-to-one fatigue management course for persons with chronic conditions and fatigue. *American Journal of Occupational Therapy*, 71, 1-9. . <https://doi.org/10.5014/ajot.2017.023440>
49. McGee, C., Carlson, K., Koethe, A., & **Mathiowetz, V.** (2017). Inter-rater and inter-instrument reliability of goniometric thumb active and passive flexion range of motion measurements in healthy hands. *Hand Therapy 0(0)* 1–8, DOI: 10.5014/ajot.2017.023440
48. McGee, C., & **Mathiowetz, V.** (2016). Evaluation of hand forces during a joint protection strategy for women with hand osteoarthritis. *American Journal of Occupational Therapy*, 71, 7101190020p1-7101190020p8. doi:10.5014/ajot.2017.022921
47. Almhdawi, A., **Mathiowetz, V.**, White, M., & delMas, R. (2016). Efficacy of Occupational Therapy Task-Oriented Approach in upper extremity post-stroke rehabilitation. *Occupational Therapy International*, 23(4), 444-456. DOI: 10.1002/oti.1447
- 46. Mathiowetz, V.**, Yu, C.-H., & Quake-Rapp, C. (2015). Comparison of a gross anatomy laboratory to online anatomy software for teaching anatomy. *Anatomical Sciences Education*, Published in (wileyonlinelibrary.com). DOI 10.1002/ase.01528.
45. Yu, C.-H., & **Mathiowetz, V.** (2014). Systematic review of occupational therapy-related interventions for people with multiple sclerosis, Part 1: Activity and participation. *American Journal of Occupational Therapy*, 68, 27-32. <http://dx.doi.org/10.5014/ajot.2014.008672>
44. Yu, C.-H., & **Mathiowetz, V.** (2014). Systematic review of occupational therapy-related interventions for people with multiple sclerosis, Part 2: Impairment. *American Journal of Occupational Therapy*, 68, 33–38. <http://dx.doi.org/10.5014/ajot.2014.008680>
43. Guderian, B., Johnson, A., & **Mathiowetz, V.** (2013). Impact of exercise frequency on handstrength of the elderly. *Physical & Occupational Therapy in Geriatrics*, 10, 1-12. DOI: 10.3109/02703181.2013.796583
42. McGee, C., Nuckley, D., & **Mathiowetz, V.** (2011). A novel instrument for the quantification of hand forces during jar opening. *Journal of Hand Therapy*, 24(4), 380. DOI: <http://dx.doi.org/10.1016/j.jht.2011.07.010>
41. Plow, M., **Mathiowetz, V.**, & Lowe, D. (2009). Comparing Individualized Rehabilitation to a Group Wellness Intervention for Persons with Multiple Sclerosis. *American Journal of Health Promotion*, 24, 23-26.

40. Plow, M., **Mathiowetz, V.**, & Resnik, L. (2008). Multiple sclerosis: Impact of physical activity on psychosocial constructs. *American Journal of Health Behavior*, 32(6), 614-626
39. **Mathiowetz, V.**, Matuska, K., Finlayson, M., Luo, P., & Chen, H. Y. (2007). One-year follow-up to a randomized controlled trial of an energy conservation course for persons with multiple sclerosis. *International Journal of Rehabilitation Research*, 30, 305-313.
38. Finlayson, M., Shevil, E., Luo, P., Chen, H. Y., & **Mathiowetz, V.** (2007). Effects of cognition on quiz performance, behavior change, and vitality after energy conservation course among people with multiple sclerosis. *International Journal of MS Care*, 9, 13-21.
37. Bohannon, R. W., Bear-Lehman, J., Desrosiers, J., Massy-Westropp, N., & **Mathiowetz, V.** (2007). Average grip strength: A meta-analysis of data obtained with a Jamar dynamometer from individuals 75 years or more of age. *Journal of Geriatric Physical Therapy*, 30, 28-30.
36. Matuska, K., **Mathiowetz, V.**, & Finlayson, M. (2007). Use and perceived effectiveness of energy conservation strategies for managing multiple sclerosis fatigue. *American Journal of Occupational Therapy*, 61, 62-69.
35. **Mathiowetz, V.**, & Busch, M. L. (2006). Participant evaluation of energy conservation course for people with multiple sclerosis. *International Journal of MS Care*, 8, 98-106
34. **Mathiowetz, V.**, Finlayson, M. L., Matuska, K., Chen, H. Y., & Luo, P. (2005). Randomized controlled trial of an energy conservation course for persons with multiple sclerosis. *Multiple Sclerosis*, 11, 592-601.
33. Liepold, A., & **Mathiowetz, V.** (2005). Reliability and validity of the Self-Efficacy for Performing Energy Conservation Strategies Assessment for persons with multiple sclerosis. *Occupational Therapy International*, 12, 234-249.
32. Finlayson, M., Shevil, E., **Mathiowetz, V.**, & Matuska, K. (2005). Reflections of occupational therapists working as members of a research team. *Australian Journal of Occupational Therapy*, 52, 101-108.
31. Lamb, A. L., Finlayson, M., **Mathiowetz, V.**, & Chen, H. Y. (2005). The outcomes of using self-study modules in energy conservation education for people with multiple sclerosis. *Clinical Rehabilitation*, 19, 475-481.
30. Mallik, P. S., Finlayson, M., **Mathiowetz, V.**, & Fogg, L. (2005). Psychometric evaluation of the Energy Conservation Strategies Survey. *Clinical Rehabilitation*, 19, 583-543.
29. Nelson, D. L., & **Mathiowetz, V.** (2004). Randomized controlled trials to investigate complex occupational therapy research questions. *American Journal of Occupational Therapy*, 58, 24-34.
28. McGee, C. W., & **Mathiowetz, V.** (2003). Relationship between upper extremity strength and instrumental activities of daily living performance among elderly women. *OTJR: Occupation, Participation, and Health*, 23, 143-154.
27. **Mathiowetz, V.** (2003). Test-retest reliability and convergent validity of the Fatigue Impact Scale for persons with multiple sclerosis. *American Journal of Occupational Therapy*, 57, 389-395.
26. Vanage, S. M., Gilbertson, K., & **Mathiowetz, V.** (2003). Effects of an energy conservation course on fatigue impact for individuals with progressive multiple sclerosis. *American Journal of Occupational Therapy*, 57, 315-323.

25. Gallus, J. M. & **Mathiowetz, V.** (2003). Test-retest reliability of the Purdue Pegboard for individuals with multiple sclerosis. *American Journal of Occupational Therapy*, 57, 108-111.
24. **Mathiowetz, V.** (2002). Comparison of Rolyan and Jamar dynamometers for measuring grip strength. *Occupational Therapy International*, 9, 201-209.
23. **Mathiowetz, V.**, Matuska, K. M., & Murphy, M. E. (2001). Efficacy of an energy conservation course for persons with multiple sclerosis. *Archives of Physical Medicine & Rehabilitation*, 82, 449-456.
22. **Mathiowetz, V.**, Vizenor, L., & Melander, D. (2000). Comparison of Baseline instruments to the Jamar dynamometer and the B & L Engineering pinch gauge. *Occupational Therapy Journal of Research*, 20, 147-162.
21. **Mathiowetz, V.**, & Matuska, K. M. (1998). Effectiveness of inpatient rehabilitation on self-care abilities of individuals with multiple sclerosis. *NeuroRehabilitation*, 11, 141-151
20. Callinan, N. J., & **Mathiowetz, V.** (1996). Soft versus hard resting splints in Rheumatoid Arthritis: Pain relief, preference, and compliance. *American Journal of Occupational Therapy*, 50, 347-352.
19. **Mathiowetz, V.**, & Wade, M. (1995). Task constraints and functional motor performance of individuals with and without multiple sclerosis. *Ecological Psychology*, 7, 99-123.
18. **Mathiowetz, V.**, & Bass Haugen, J. (1994). Motor behavior research: Implications for approaches to CNS dysfunction. *American Journal of Occupational Therapy*, 48, 733-745.
17. **Mathiowetz, V.** (1993). Role of physical performance component evaluations in occupational therapy functional assessment. *American Journal of Occupational Therapy*, 47, 225-230. (Invited paper).
16. **Mathiowetz, V.** (1993). Validity of the Jebsen Hand Function Test (abstract). *Journal of Hand Therapy*, 6, 65-66.
15. **Mathiowetz, V.** (1992). *Informational support and functional motor performance*. *Dissertation Abstracts International*, 52, 11A. (University Microfilms No. 92-12071)
14. **Mathiowetz, V.** (1991). Reliability and validity of grip and pinch strength measurements. *Critical Reviews in Physical and Rehabilitation Medicine*, 2, 201-212. (Invited paper)
13. **Mathiowetz, V.** (1990). Effects of three trials on grip and pinch strength measurements. *Journal of Hand Therapy*, 3, 195-198.
12. Woody, R., & **Mathiowetz, V.** (1988). Effect of forearm position on pinch strength measurements. *Journal of Hand Therapy*, 1, 124-126.
11. Flood-Joy, M., & **Mathiowetz, V.** (1987). Grip strength measurement: A comparison of three Jamar dynamometers. *Occupational Therapy Journal of Research*, 7, 235-243.
10. **Mathiowetz, V.**, Wiemer, D. M., & Federman, S. M. (1986). Grip and pinch strength: Norms for 6- to 19-year-olds. *American Journal of Occupational Therapy*, 40, 705-711.
9. **Mathiowetz, V.**, Rogers, S. L., Dowe-Keval, M., Donahoe, L., & Rennells, C. (1986). The Purdue Pegboard: Norms for 14 to 19 year olds. *American Journal of Occupational Therapy*, 40, 174-179.
8. **Mathiowetz, V.**, Federman, S., & Wiemer, D. (1985). Box and Block Test of manual dexterity: Norms for 6-19 year olds. *Canadian Journal of Occupational Therapy*, 52, 241-245.
7. **Mathiowetz, V.**, Rennells, C., & Donahoe, L. (1985). Effect of elbow position on grip and key pinch strength. *Journal of Hand Surgery*, 10A, 694-697.



6. McPherson, J. J., **Mathiowetz, V.**, Strachota, E., Benrud, C., Ingrassia, A., & Spitz, M. L. (1985). Muscle tone: Objective evaluation of static component at the wrist. *Archives of Physical Medicine and Rehabilitation*, 66, 670-674.
5. **Mathiowetz, V.**, Weber, K., Kashman, N., & Volland, G. (1985). Adult norms for the Nine Hole Peg Test of finger dexterity. *Occupational Therapy Journal of Research*, 5, 24-38.
4. **Mathiowetz, V.**, Volland, G., Kashman, N., & Weber, K. (1985). Adult norms for the Box and Block Test of manual dexterity. *American Journal of Occupational Therapy*, 39, 386-391.
3. **Mathiowetz, V.**, Kashman, N., Volland, G., Weber, K., Dowe, M., & Rogers, S. (1985). Grip and pinch strength: Normative data for adults. *Archives of Physical Medicine and Rehabilitation*, 66, 69-74.
2. **Mathiowetz, V.**, Weber, K., Volland, G., & Kashman, N. (1984). Reliability and validity of hand strength evaluations. *Journal of Hand Surgery*, 9A, 222-226.
1. **Mathiowetz, V.**, Bolding, D. J., & Trombly, C. A. (1983). Immediate effects of positioning devices on the normal and spastic hand measured by electromyography. *American Journal of Occupational Therapy*, 37, 247-254.

#### **Non-Peer-Reviewed Publications**

6. **Mathiowetz, V.** (2000). Reflections on the quality and quantity of occupational therapy research as we begin the new millennium. *Proceedings of the 13<sup>th</sup> Annual Midwest Deans' Occupational Therapy Research Day*. University of Wisconsin-Milwaukee, Milwaukee, WI.
5. Marmer, L., **Mathiowetz, V.**, & Bass Haugen, J. (November, 2, 1992). Treating CNS dysfunction: New approaches. *ADVANCE for Occupational Therapist*, 8, 10.
4. **Mathiowetz, V.** (1992). Effects of purposeful activity on motor performance: A research synopsis. *MS Messages, Spring*, 7-8. (Invited paper)
3. **Mathiowetz, V.** (1991). *Informational support and functional motor performance*. Unpublished doctoral dissertation, University of Minnesota, Minneapolis.
2. Caruso, L., & **Mathiowetz, V.**, (1985). *Rheumatoid Arthritis: Occupational Therapy Evaluation and Treatment Planning*. (Videotape study guide). Milwaukee, WI: Columbia Hospital.
1. **Mathiowetz, V.**, & Brambilla, M. (1979). Tendon transfers for quadriplegics: Implications for therapy. *Physical Disabilities Specialty Section Newsletter, Summer*, 3. (Invited paper)

#### **Articles Submitted for Publication**

##### **Educational Videos-Therapist Education Material**

- "I Can Still Smile" (16mm film) C-4 Quadriplegic Women demonstrates use of wheelchair and various mouth stick activities. Department of PM&R, University of Minnesota, Minneapolis, MN, 1980.
- "Rheumatoid Arthritis: Occupational Therapy Evaluation and Treatment Planning" (videotape). Columbia Hospital and University of Wisconsin-Milwaukee, Milwaukee, WI, 1985.

## Books

### Chapters in Books

13. **Mathiowetz, V.** (2016). Task-Oriented approach to stroke rehabilitation. In G. Gillen (Ed.), *Stroke rehabilitation: A function-based approach* (4<sup>nd</sup> ed., pp. 59-78). St. Louis: Elsevier.
12. Almhdawi, K., **Mathiowetz, V.**, & Bass, J. D. (2014). Assessing abilities and capacities: Motor planning and performance. In M. V. Radomski & C. A. T. Latham (Eds.), *Occupational therapy for physical dysfunction* (7th ed., pp. 242-275). Baltimore: Lippincott Williams & Wilkins.
11. **Mathiowetz, V.** (2011). Task-oriented approach to stroke rehabilitation. In G. Gillen (Ed.), *Stroke rehabilitation: A function-based approach* (3<sup>rd</sup> ed., pp. 80-99). St. Louis: Elsevier Mosby.
10. **Mathiowetz, V.**, & Bass-Haugen, J. (2008). Assessing abilities and capacities: Motor behavior. In M. V. Radomski & C. A. T. Latham & (Eds.), *Occupational therapy for physical dysfunction* (6th ed., pp. 186-211). Baltimore: Lippincott Williams & Wilkins.
9. Bass-Haugen, J. & **Mathiowetz, V.**, (2008). Optimizing motor behavior using the occupational therapy task-oriented approach. In M. V. Radomski & C. A. T. Latham & (Eds.), *Occupational therapy for physical dysfunction* (6th ed., pp. 598-617). Baltimore: Lippincott Williams & Wilkins.
8. **Mathiowetz, V.** (2004). OT Task-Oriented approach to persons post-stroke. In G. Gillen & A. Burkhardt (Eds.), *Stroke rehabilitation: A function-based approach* (2<sup>nd</sup> ed., pp. 59-74). St. Louis: Mosby.
7. **Mathiowetz, V.**, & Bass-Haugen, J. (2002). Assessing abilities and capacities: Motor behavior. In C. A. Trombly & M. V. Radomski (Eds.), *Occupational Therapy for Physical Dysfunction* (5th ed., pp. 137-158). Baltimore: Lippincott Williams & Wilkins.
6. Bass-Haugen, J., **Mathiowetz, V.**, & Flinn, N. (2002). Optimizing motor behavior using the occupational therapy task-oriented approach. In C. A. Trombly & M. V. Radomski (Eds.), *Occupational Therapy for Physical Dysfunction* (5th ed., pp. 481-499). Baltimore: Lippincott Williams & Wilkins.
5. **Mathiowetz, V.**, & Bass Haugen, J. (1995). Evaluation of motor behavior: Traditional and contemporary views. In C. A. Trombly (Ed.), *Occupational Therapy for Physical Dysfunction* (4th ed., pp. 157-185). Baltimore: Williams & Wilkins.
4. Bass Haugen, J., & **Mathiowetz, V.** (1995). Contemporary task-oriented approach. In C. A. Trombly (Ed.), *Occupational Therapy for Physical Dysfunction* (4th ed., pp. 510-527). Baltimore: Williams & Wilkins.
3. **Mathiowetz, V.** (1990). Grip and pinch strength measurement. In L. Amundsen (Ed.), *Muscle Strength Testing* (pp.163-177). New York: Churchill Livingstone.
2. **Mathiowetz, V.**, & Carter, E. (1986). Functional and structural relationships (Chapter 9). In J. J. McPherson (Ed.), *Manual for the Use of the Muscle Tone Measuring Device*. Menomonee Falls, WI: Rolyan, Inc.
1. Artzberger, S., & **Mathiowetz, V.** (1983). Splinting the arthritic hand and wrist (Chapter). In L. Kautzman (Ed.), *Arthritis: A Modular Curriculum for Occupational Therapy*. Milwaukee, WI: University of Wisconsin-Milwaukee.

## **Presentations**

### **Invited Oral Presentations at International Professional Meetings, Conferences, etc.**

- Mathiowetz, V.** (2018). Fatigue management for persons with multiple sclerosis. Oral presentation at Jordan University of Science and Technology, Irbid, Jordan.
- Mathiowetz, V.** (2004). An OT Task-Oriented Approach to persons post-stroke and Effects of an energy conservation course for persons with multiple sclerosis. Two-day workshop at National Cheng Kung University, Tainan, Taiwan

### **Invited Oral Presentations at National Professional Meetings, Conferences, etc.**

- Mathiowetz, V.** (2004). Traditional vs. contemporary approaches to motor control for persons post-stroke: Current controversies. Physical Disabilities Special Interest Section Roundtable Consultation at AOTA National Conference, Minneapolis, MN.
- Mathiowetz, V.** (2002). Pathway to becoming an outcomes researcher. Presented at CORE Outcomes Research Symposium: Pathways to Evidenced-Based Practice, AOTA National Conference, Miami, FL.
- Mathiowetz, V.** (1997). Overview of motor control & motor learning theories. Presented at National Center for Medical Rehabilitation Research (NCMRR) Workshop, Learning Theory & Research in Facilitating Patient Learning during Medical Rehabilitation, Bethesda, MD.
- Mathiowetz, V.** (1996). Principles and applications of a task-oriented approach to treatment. AOTA Advanced Practice Institute: Promoting Function After Stroke: The Challenge for Occupational Therapy Practitioners, Philadelphia, PA.
- Mathiowetz, V.** (1994). Informational support and functional motor performance. Research Colloquium at American Occupational Therapy Association National Conference, a joint conference with the Canadian Occupational Therapy Association, Boston, MA.
- Mathiowetz, V.** (1991). Role of Sensory Motor Component Measurements in Occupational Therapy Assessments. Symposium on Measurement and Assessment: Directions for Research in Occupational Therapy, University of Illinois at Chicago

### **Invited Oral Presentations at Local and Regional Professional Meetings, Conferences, etc.**

- Mathiowetz, V.** (2015). Lessons learned from a 41 year career in OT. MOTA Communication Award Keynote address at MOTA State Conference, Bloomington, MN.
- Mathiowetz, V. & Yu, C-H.** (2013). OT task-oriented approach for persons post-stroke (2 hrs.). MOTA State Conference, Bloomington, MN.
- Mathiowetz, V.** (2008). Fatigue management after bone marrow transplant. Presented at 40<sup>th</sup> Anniversary Survivorship Education Conference, Minneapolis, MN
- Mathiowetz, V.** (2002). MS fatigue study. Research Symposium, Minnesota Chapter, National Multiple Sclerosis Society, St. Louis Park, MN.
- Mathiowetz, V.** (2001). Energy conservation strategies to manage fatigue. Solutions for a New Day: Symptom Management conference, Minnesota Chapter, National Multiple Sclerosis Society, St. Louis Park, MN

- Mathiowetz, V.** (2000). Task constraints and functional motor performance: Implications for stroke rehabilitation. Motor Control Research: Basic Advances & Applications to Rehabilitation seminar series, Ohio State University, Columbus, OH.
- Mathiowetz, V.** (2000). Reflections on the quality and quantity of occupational therapy research as we begin the new millennium. Keynote address at 13<sup>th</sup> Annual Midwest Deans' Occupational Therapy Research Day. Milwaukee, WI
- Mathiowetz, V., & Flinn, N.** (1998). Stroke rehabilitation: A contemporary task-oriented approach. Workshop presented by Rehab Educators, Akron, OH
- Mathiowetz, V., & Flinn, N.** (1998). Promoting function: A task-oriented approach for individuals with CNS dysfunction. Workshop presented at University of Minnesota, St. Paul, MN.
- Mathiowetz, V.** (1997). Task-oriented approach to CNS dysfunction. Workshop, Motor Control, Motor Learning, & Spasticity Management: Current Trends, Mankato, MN.
- Mathiowetz, V., Bass Haugen, J., & Flinn, N.** (1996). Motor behavior research: Implications for approaches to CNS dysfunction. Workshop at Sister Genevieve Cummings Colloquia, College of St. Catherine, St. Paul, MN
- Mathiowetz, V.** (1995). Motor behavior research: Implications for pediatric approaches to CNS dysfunction. Fall EMSEC OT/PT Meeting, St. Paul, MN.
- Mathiowetz, V., & Flinn, N.** (1993). Motor behavior research: Implications for approaches to CNS dysfunction (children to adulthood). Institute at MOTA State Conference, Minneapolis, MN.
- Mathiowetz, V., & Flinn, N.** (1993). Motor behavior theories: Implications for OT practice. Workshop at the 7th Annual Conference, No Easy Answers: The Care and Rehabilitation of the Stroke Patient, North Memorial Medical Center, Robbinsdale, MN.
- Mathiowetz, V.** (1993). Motor Control, Motor Development, and Motor Learning Theories: Implications for Pediatric Assessment and Treatment. A four-part workshop for occupational and physical therapists in the Robbinsdale School District.
- Mathiowetz, V. and Reisman, J.** (1990). Integrating Research and Clinical Practice. MOTA State Conference, Minneapolis, MN.
- Mathiowetz, V.** (1987). Functional Positioning. No Easy Answers: The Care and Rehabilitation of the Stroke Patient Workshop, North Memorial Medical Center, Robbinsdale, MN.
- Mathiowetz, V.** (1987). Management of Tendon Transfers. Practical Anatomy of the Upper Extremity for Therapists Workshop, MN Hand Rehabilitation, St. Paul, MN, 1987.
- Mathiowetz, V.** (1986). Hand Strength and Dexterity: Assessment and Rationale. MOTA Workshop, Hand Rehabilitation: An Overview. VA Medical Center, Minneapolis, MN.
- Mathiowetz, V.** (1986). Upper Extremity Prosthetics. Medical Factors in Vocational Rehabilitation course. Sister Kenny Institute, Minneapolis, MN.
- Mathiowetz, V.** (1984). Biofeedback: Applications in Physical Disabilities. Rehabilitation Staff, Sheboygan Memorial Hospital, Sheboygan, WI.
- Mathiowetz, V.** (1984). New Adult Norms for Hand Strength and Dexterity. Health Sciences Research Forum, UWM, and Rehabilitation Staff, Columbia Hospital, Milwaukee, WI.
- Mathiowetz, V.** (1984). OT: Update on Evaluation and Treatment of Hemiplegia. Co-presenter with J. McPherson. One day Workshop, West Bend, WI.

- Mathiowetz, V.** (1983). Interrelationships of OT and PT. Wisconsin PT Association, SE District Meeting, Milwaukee, WI.
- Mathiowetz, V.** (1983). Orthotic Management of Spasticity. Upper Extremity Orthotics Workshop, RIC, Chicago, IL, 1984,
- Mathiowetz, V.** (1983). Perceptual Dysfunction in the Adult Brain-damaged Patient: Selected Evaluation and Treatment Ideas. UWM Clinical Faculty, Milwaukee, WI.
- Mathiowetz, V.** (1982). Evaluation and Treatment of Perceptual Deficits. Rehabilitation Staff, Trinity Memorial Hospital, Cudahy, WI.
- Mathiowetz, V.** (1982). Orthotic Management of Spasticity. Upper Extremity Orthotics Workshop at Rehabilitation Institute of Chicago, Chicago, IL.
- Mathiowetz, V.** (1981). Peripheral Neuropathy and Alcoholism. Rehabilitation Staff, DePaul Bellevue Treatment Center, Milwaukee, WI.
- Mathiowetz, V.** (1980). OT-PT Role in Chronic Pain Program. Rehabilitation and Pain Center Staff. Nat Polinsky Rehabilitation Center, Duluth, MN.
- Mathiowetz, V.** (1978). Wheelchair Prescription for Spinal Cord Injured. Rehabilitation Staff, St. Luke's Hospital, Fargo, ND.
- Mathiowetz, V.** (1977). Arthritis Splinting (speaking and lab sessions). Arthritis Update Workshop. Minneapolis, MN.

#### **Peer-reviewed Oral Presentations at Professional Meetings, Conferences, etc.**

- Mathiowetz, V., & de Sam Lazaro, S.** (2016). Post-professional education options for occupational therapists: OTD vs. PhD. Presented at MOTA State Conference, Bloomington, MN.
- Mathiowetz, V. & Yu, C-H.** (2013). OT task-oriented approach for persons post-stroke (2 hrs.). MOTA State Conference, Bloomington, MN.
- Mathiowetz, V. & Yu, C-H.** (2013). Comparison of cadaver prosection lab to online Anatomy TV for teaching anatomy AOTA National Conference, San Diego, CA, MN eLearning Summit, Roseville, MN, 2014 WOFT International Conference, Yokohama, Japan, and Asian-Pacific Hand Therapy Conference in Malaysia.
- Mathiowetz, V. & Almhdawi, K.** (2012). Effects of Occupational Therapy Task-Oriented Approach in UE post-stroke rehabilitation. MOTA State Conference, Bloomington, MN.
- Bauer, J. L., & **Mathiowetz V.** (2012). Pilot study of an energy conservation course for persons with chronic diseases and fatigue. MOTA State Conference. Bloomington, MN.
- Mathiowetz, V., Yu, C-H, Arbesman, M., Lieberman, D., & Sheard, K.** (2012). Evidence-based literature review on occupational therapy and adults with neurodegenerative diseases (MS & ALS). AOTA National Conference, Indianapolis, IN.
- Mathiowetz, V., & Barrett, K.** (2011). Post-professional education options for occupational therapists: OTD and PhD. MOTA State Conference, Bloomington, MN.
- Mathiowetz, V.,** (2008). Randomized controlled trial of an energy conservation course for persons with multiple sclerosis. International Congress on Chronic Disease Self-Management, Melbourne, Australia.
- Henderson, M.L., Donavan, M.L., & **Mathiowetz, V.** (2007). Post-professional OT education options: Focus on OTD vs. PhD. MOTA State Conference, Rochester, MN.

- Mathiowetz, V., Matuska, K., & Finlayson, M. (2006).** Randomized clinical trial of an energy conservation course for persons with multiple sclerosis. 14<sup>th</sup> WFOT Congress, Sydney, Australia.
- Mathiowetz, V., Matuska, K., & Finlayson, M. (2005).** One-year follow-up of a randomized controlled trial of an energy conservation course for persons with multiple sclerosis. AOTA National Conference, Long Beach, CA
- Mathiowetz, V., Matuska, K., & Finlayson, M. (2004).** Randomized clinical trial of an energy conservation course for persons with multiple sclerosis. Consortium of MS Centers International Conference. Toronto, Canada.
- Mathiowetz, V., Matuska, K., & Finlayson, M. (2004).** Effects of an energy conservation course for persons with multiple sclerosis: A randomized clinical trial. AOTA National Conference, Minneapolis, MN.
- Mathiowetz, V., Vanage, S., & Gilbertson, K. (2002).** Effects of an energy conservation course for individuals with multiple sclerosis. 13<sup>th</sup> WFOT Congress, Stockholm, Sweden.
- Mathiowetz, V., Bass-Haugen, J., & Flinn, N. (2002).** Promoting function: An OT Task-Oriented Approach to CNS dysfunction. Workshop 13<sup>th</sup> WFOT Congress, Stockholm, Sweden.
- Vanage, S., Gilbertson, K., & **Mathiowetz, V. (2002).** Effects of an energy conservation course on individuals with progressive multiple sclerosis. AOTA National Conference, Miami, FL.
- Mathiowetz, V. (2002).** Issues in grip and pinch strength assessment of the upper extremity: An update. MOTA State Conference, St. Cloud, MN.
- Mathiowetz, V., & Matuska, K. (2000).** Efficacy of an energy conservation course for persons with multiple sclerosis. Consortium of Multiple Sclerosis Centers Annual Meeting, Halifax, Nova Scotia, Canada.
- Mathiowetz, V., Matuska, K., & Murphy, M. (2000).** Efficacy of an energy conservation course for persons with multiple sclerosis. AOTA National Conference, Seattle, WA.
- Mathiowetz, V., & Matuska, K. (1999).** Self-care outcomes of inpatient rehabilitation for individuals with multiple sclerosis. AOTA National Conference, Indianapolis, IN.
- Mathiowetz, V., Matuska, K., Murphy, M., & Mueller, P. (1999).** Effects of an energy conservation course for persons with multiple sclerosis. MOTA State Conference, Minneapolis, MN.
- Mathiowetz, V., & Matuska, K. (1998).** Self-care outcomes of inpatient rehabilitation for individuals with multiple sclerosis. 12th International Congress of World Federation of Occupational Therapists, Montreal, Canada.
- Mathiowetz, V. & Matuska, K. (1997).** Fatigue management. MOTA State Conference, Minneapolis, MN.
- Mathiowetz, V., Bass Haugen, J., & Flinn, N. (1997).** Motor behavior research: Implications for approaches to CNS dysfunction. Workshop at Australian Association of Occupational Therapist National Conference, Perth, Australia.
- Mathiowetz, V., & Matuska, K. (1995).** Effectiveness of occupational therapy for individuals with multiple sclerosis. MOTA State Conference, Bloomington, MN.
- Mathiowetz, V., Bass Haugen, J., & Flinn, N. (1995).** Motor behavior research: Implications of approaches to CNS dysfunction. Pre-conference Institute at American Occupational Therapy Association National Conference, Denver, CO.

- Callinan, N., & **Mathiowetz, V.** (1994). Soft versus hard resting splints in Rheumatoid Arthritis. MOTA State Conference, Rochester, MN.
- Mathiowetz, V.**, & Bass Haugen, J. (1994). A paradigm shift in motor behavior research: Implications for approaches to CNS dysfunction. 11th International Congress of World Federation of Occupational Therapists, London, England.
- Bass Haugen, J., & **Mathiowetz, V.** (1994). Educational implications of a paradigm shift in motor behavior research. 11th International Congress of World Federation of Occupational Therapists, London, England.
- Mathiowetz, V.** (1994). Reliability and validity of hand strength measurements. 11th International Congress of World Federation of Occupational Therapists, London, England.
- Callinan, N., **Mathiowetz, V.**, & Fransen, J. (1993). Soft versus hard resting splints in Rheumatoid Arthritis. National Scientific Meeting of the Arthritis Health Professionals Association, San Antonio, TX.
- Mathiowetz, V.** (1992). Validity of the Jebsen Hand Function Test. American Society of Hand Therapists National Convention, Phoenix, AZ. \*
- Mathiowetz, V.** & Flinn, N. (1992). Past, Present, and Future Approaches to CNS Dysfunction: A Paradigm Shift. MOTA State Conference, Minneapolis, MN, 1992.
- Mathiowetz, V.** (1992). Informational Support and Functional Motor Performance. AOTA National Conference, Houston, TX, 1992.
- Mathiowetz, V.** (1991). Effects of Purposeful Activity on Motor Performance. MOTA State Conference, Duluth, MN.
- Mathiowetz, V.** (1991). Informational Support and Functional Motor Performance. North American Society for the Psychology of Sport and Physical Activity Conference, Monterey, CA.
- Mathiowetz, V.** (1989). Effects of Environmental Affordances and Constraints on Motor Performance. Fifth International Conference on Event Perception and Action, Oxford, OH.
- Mathiowetz, V.** (1988). Critique of Dexterity and Hand Function Tests. Great Southern Occupational Therapy Conference, Orlando, FL, 1988.
- Mathiowetz, V.** (1988). Variables that Affect Hand Strength Measurement Accuracy. MOTA State Conference, Minneapolis, MN.
- Mathiowetz, V.** (1988). Effects of Body Position and Instrument Accuracy on Hand Strength Measurements. Great Southern Occupational Therapy Conference, New Orleans. LA.
- Mathiowetz, V.** (1987). Effects of Body Position and Instrument Accuracy on Hand Strength Measurements. AOTA National Conference, Phoenix, AZ
- Mathiowetz, V.** (1987). Critique of Dexterity and Hand Function Tests and Graduate Education for Occupational Therapists. MOTA State Conference, Minneapolis, MN.
- Mathiowetz, V.** (1986). Grip and Pinch Strength Measurement: An Update. MOTA State Conference, St. Cloud, MN.
- Mathiowetz, V.** (1984). New Adult Norms for Grip and Pinch Strength. Poster presentation at American Congress of Rehabilitation Medicine, Boston, MA.
- Mathiowetz, V.** (1984). New Adult Norms for Hand Strength and Dexterity. WOTA State Conference, Green Bay, WI.

- Mathiowetz, V.** (1984). New Adult Norms for Hand Strength and Dexterity (one hour) and Objective Measurement of Muscle Tone: Research and Practice. Co-presenter with J McPherson. One day Institute. National AOTA Conference, Kansas City, MO.
- Mathiowetz, V.** (1983). Orthotic Management of Spasticity. Upper Extremity Orthotics Workshop, MOTA State Conference, St. Paul, MN.
- Mathiowetz, V.** (1983). Unilateral Neglect in the Brain-damaged Patient: Implications for Occupational Therapy. WOTA State Conference, LaCrosse, WI.
- Mathiowetz, V.** (1983). Immediate Effects of Positioning Devices on the Normal and Spastic Hand as Measured by EMG. Research Forum, National AOTA Conference, Portland, OR.

#### **Poster Abstract Presentations at Professional Meetings, Conferences, etc.**

- Vos-Draper, T., Morrow, M., Ferguson, J., & Mathiowetz, V. (2018). Self-efficacy for pressure reliefs improves with pressure mapping. AOTA Adult Rehabilitation Specialty Conference, Los Angeles, CA.
- Davis, K. & **Mathiowetz, V. G.** (2018). Effects of meditative movements on the symptoms of persons with chronic health conditions. MOTA State Conference, St. Paul, MN.
- Mogush, A., & **Mathiowetz, V.** (2016). Effects of one-to-one fatigue management course for persons with chronic conditions. AOTA National Conference, Chicago, IL.
- Mathiowetz, V.** & Yu, C-H. (2015). Evidence-based literature review on fatigue management and adults with multiple sclerosis. AOTA National Conference, Nashville, TN.
- Almhdawi, K. **Mathiowetz, V.** & White, M (2014). Multidisciplinary clinical rehabilitation: Effects of occupational therapy task-oriented approach in upper extremity post-stroke rehabilitation. 9<sup>th</sup> World Stroke Congress, Istanbul, Turkey.
- Almhdawi, K. **Mathiowetz, V.** & White, M. (2014). WSC-0731 Multidisciplinary clinical rehabilitation: Effects of occupational therapy task-oriented approach in upper extremity post-stroke rehabilitation. *International Journal of Stroke*, 9 (S3), 41-331. doi: 10.1111/ij.s.12367
- Mathiowetz, V.** & Yu, C-H. (2014). Evidence-based literature review on fatigue management and adults with multiple sclerosis. WOFT International Conference, Yokohama, Japan, and MOTA State Conference, Bloomington, MN.
- Egan, K., Fung, D., Tekippe, K., & **Mathiowetz, V.** (2011). Comparison of hand-strengthening devices: Rolyan<sup>®</sup> Progressive<sup>™</sup> Putty versus Digi-Flex<sup>®</sup>. MOTA State Conference, Bloomington, MN.
- Egger, B., Guderian, B., Johnson, A., Johnson, M. & **Mathiowetz, V.** Impact of exercise frequency on hand strength of the elderly. MOTA State Conference, Bloomington, MN.
- Mathiowetz, V.,** & Abdul, S. (2011). Effects of Rolyan ergonomic hand exerciser versus Rolyan therapy putty on grip strength of persons with multiple sclerosis. AOTA National Conference, Philadelphia, PA.
- Mathiowetz, V.,** Egger, B., Guderian, B., Johnson, A., & Johnson, M. (2011). Impact of exercise frequency on hand strength of the elderly. AOTA National Conference, Philadelphia, PA.
- Mathiowetz, V.,** & Freitag, M., (2010). Mindfulness & energy conservation strategies for persons with MS & fatigue: Pilot study. 15<sup>th</sup> International Congress of WFOT, Santiago, Chile.



- Freitag, M., **Mathiowetz, V.**, McGee, C., & Pribyl, J (2009). Mindfulness-based energy conservation strategies for persons with multiple sclerosis & fatigue: Pilot study. Consortium of MS Centers International Conference, Atlanta, GA and MOTA State Conference.
- Howe, D., & **Mathiowetz, V.** (2006). Effects of self-learning energy conservation modules for persons with multiple sclerosis. AOTA National Conference, Charlotte, NC
- Mathiowetz, V.**, Matuska, K., & Finlayson, M. (2004). Randomized clinical trial of an energy conservation course for persons with multiple sclerosis. American Committee for Treatment & Research in Multiple Sclerosis (ACTRIMS) International Conference. Toronto, Canada.
- Mathiowetz, V.**, & Carroll, G. (2003). Effectiveness of an energy conservation course on fatigue impact for persons with progressive multiple sclerosis: A follow-up study. AOTA National Conference, Washington, DC.
- Mathiowetz, V.**, & Matuska, K. (1996). Effectiveness of inpatient rehabilitation on self-care abilities for individuals with multiple sclerosis. Consortium of Multiple Sclerosis Centers Annual Conference, Atlanta, GA.
- Mathiowetz, V.** (1989). Effects of Affordances on the Performance of Functional Tasks. AOTA National Conference, New Orleans, LA and 1990MOTA State Conference, Minneapolis, MN.

#### **Other Key Activities and Accomplishments: Consensus Conferences**

- Mathiowetz, V.** (2015). Prioritizing comparative effectiveness research questions for the treatment of multiple sclerosis: A Stakeholder Workshop. AOTA's MS Expert. Patient-Centered Outcomes Research Institute (PCORI). Washington, DC.
- Mathiowetz, V.** (2012). Comprehensive management of complex symptoms in Multiple Sclerosis. Participant in CMSC Consensus Conference in Cleveland, OH
- Mathiowetz, V.** (2007). Fatigue evaluation and interventions for persons with multiple sclerosis. Participant in CMSC Consensus Conference on Rehabilitation Outcomes: Gait and Fatigue, Chicago, IL
- Mathiowetz, V.** (2005). Increasing the quality and quantity of MS rehabilitation research. Presentation & participant at NMSS & NCMRR Consensus Conference.

#### **TEACHING AND CURRICULUM DEVELOPMENT**

##### **University of Minnesota 1996-2017**

- Functional Anatomy & Kinesiology (Course Director)
- OTPI: Occupation through Remediation (Course Director)
- Scholarly Inquiry in Health Sciences (Course Director)
- Scholarly Project I & II (Course Director)
- Introduction to Rehabilitation Science (Course Director)
- Rehabilitation Science: Past, Present, Future (Course Director)

##### **College of St. Catherine 1985-1996**

- Physical Disabilities: Child-Adult I, II, & III (Course Director)
- Research Methods or Seminar (Course Director)
- Clinical Kinesiology (Course Director)

Motor Learning (Course Director)  
 Motor Assessment and Treatment (Course Director)  
 Statistics & Research (Course Director)  
 Advanced Topics: Critique of Neuromotor Approaches (Course Director)  
 Advanced Clinical Practice & Leadership (Course Director)  
 Clinical Studies I (Course Director)

### **University of Wisconsin – Milwaukee 1981-1985**

Occupational Therapy for Physical Dysfunction I & II (Course Director)  
 Research Seminar (Course Director)  
 Fundamentals of Biomechanics & Applied Anatomy (Course Director)  
 Rehabilitation of the Hand (Course Director)  
 Independent Study (Course Director)

### **Curriculum Design/Development**

UMN Curriculum Committee, 1996-2017

### **Online/Hybrid Course Design and Development**

CE: Neurorehabilitation: Constraint-Induced Movement Therapy (CIMT) and OT Task-Oriented Approach (in development).  
 CE: Upper Extremity Strength Evaluation and Intervention (Course Director) (2018)  
 Functional Anatomy & Kinesiology (Course Director)  
 OTPI: Occupation through Remediation (Course Director)  
 Scholarly Inquiry in Health Sciences (Course Director)  
 Scholarly Project I & II (Course Director)

### **Collaborative Efforts and Activities**

OT Task-Oriented Approach in OTPI Occupation through Neurorehabilitative Approaches. (Guest Lecturer)  
 FIPSEE (1<sup>st</sup> yr. taught)

### **Faculty Development Activities regarding teaching or administration**

Various Teaching and Learning Workshops, UMN, 1996- present  
 Various Technology-Enhanced Learning workshops, UMN, 2006-2009  
 American Council on Education Workshop for Academic Administrators (4 days).  
 Washington, DC, 1995.  
 Program Evaluation Workshop at AOTA Program Director's Meeting, Salt Lake City, UT, 1994.

### **Continuing Medical Education**

Refresher Course 1996 -2016

### **ADVISING AND MENTORING**

## Graduate Student Activities

### Master's Scholarly Projects Directed (University of Minnesota)

- Davis, K., Emmons, T., Felts, J., & Wheeler, T. (2017). Effects of meditative movements on person with chronic health conditions
- Cheung, N., Henze, J., & Price, K. (2017). Reliability of the *Occupational Therapy Acute Care Self-Efficacy Scale* for OT students.
- Bruner, A., Buesgens, W., Perovich, K., & Walstrom, E. (2016). Effects of meditative movements on person with chronic health conditions.
- Conrath, A., Lambrecht, K., Mogush, A., & Schneider, M. (2015). One-to-one *Managing Fatigue* course for increasing self-efficacy and energy conservation strategies in persons with chronic conditions and fatigue.
- Geiger, E., Kullback, A., Lindstrom, K., Perlman, J., & O'Donnell, A., (2015). Efficacy of *Managing Fatigue: An individualized fatigue management course* for persons with chronic conditions and fatigue.
- Wall, B., & Olson, K. (2015). Effectiveness of a fatigue management one-to-one format course for persons with chronic conditions and fatigue.
- Krolak, B., Hamel, L., Mason, C., Muller, E., & Van An del, K. (2014). Assessment of finger dexterity in medical laboratory science students: Before and after academic training.
- Kali Carlson, K., Glader, V., Koethe, A., & Turgeon, A. (2014). Inter-rater and inter-instrument reliability of goniometric thumb range of motion measurements and a comparison to normative data.
- Pritchett, K., Schweiss, M., Hermsen, S., & Wortz, A. (2013). Assessment of finger dexterity in clinical laboratory science students across academic and clinical training.
- Brown, M., Brotzler, A., Maunu, M., & McLachlan, A. (2013). Occupational Therapists' perception of the effectiveness of fatigue management education: Group versus individual format.
- Bagnall, A., Bauer, K., Elkins, A., Behnke, C., Karow, T. (2012). Effects of energy conservation course for individuals with chronic diseases and fatigue
- Gottenborg, K., Granger, K., Wood, J., Reichert, B (2012). Effects of energy conservation course for individuals with chronic diseases and fatigue.
- Berry, J., Guiney, K., & Tacheny, L. (2012). Occupational Therapy Fieldwork Study
- Post, A., Seurer, L., Truong, S., & Chery, R. (2011). Effects of energy conservation course for individuals with chronic diseases and fatigue.
- Degener, R., Omer, F., Flohr, K., & Hansen, K. (2011). Occupational therapy workforce needs in Minnesota.
- Bauer, J., Koch, C., Owen T., Wendorff, C. (2011). Effects of energy conservation course for individuals with chronic diseases and fatigue.
- Egger, B., Guderian, B., Johnson, A., & Johnson, M. (2010). Impact of exercise frequency on hand strength of elderly.
- Egan, K., Lam Fung, D., Stefanowski, C., & Tekippe, K. (2010). Comparison of Rolyan Progressive Putty versus Digi-Flex on grip and pinch strength in persons with hand strength weakness.
- Holden, K., Juaira, K., Saylor, K., Tracy, C., & Wills, J. (2010). Effects of energy conservation course for individuals with chronic diseases and fatigue: A pilot study.

- Elm, K., Fischer, N., Stalberger, J., & Thonander, J. (2010). Effects of a Six-Week Energy Conservation Course for Cancer Survivors: A Pilot Study
- Gist, C., & Rose, A. (2010). Comparison of Rolyan Progressive Putty versus Digi-Flex on grip and pinch strength in persons with hand strength weakness.
- Kulmeshkenov, T. Pierce, M., Wright, R., & Yost, K. (2009). Impact of exercise frequency on hand strength of elderly.
- Stiner, S. & Berg, L. (2009). ). Effect of an energy conservation course for persons post bone marrow transplant.
- Gerhart, C., Harms, C., Johnson, E., & Olson, M. (2009). Impact of exercise frequency on hand strength of elderly.
- Nalezny, M., Palmer, K., & Rios, M., (2009). Effect of an energy conservation course for persons post bone marrow transplant.
- Bannick, J., Casey, H., & Prell, K. (2008). Comparison of Rolyan Progressive Putty versus Digi-Flex on grip and pinch strength in persons with hand strength weakness.
- Darger, M., & Olson, S. (2008). Effects of an energy conservation course with persons with fibromyalgia and chronic fatigue syndrome.

### **Master's Plan B Projects Directed (University of Minnesota)**

- Vantrease, L. (2009). Comparison of Jaeco and Zoncoarm mobile arm supports for persons with multiple sclerosis.
- Pautsch, J. (2009). Satisfaction, Preference, and Adherence of Rolyan Therapy Putty vs. Digi-Flex during a Hand Strengthening Program.
- York, M. (2009). Randomized controlled trial of hand strengthening devices: Rolyan Progressive Putty versus Digi-Flex.
- Delgado, S. (2008). Effects of an energy conservation course with persons with fibromyalgia and chronic fatigue syndrome.
- Nguyen, S. (2008). Effects of an elevating mobile arm support on upper extremity weakness in persons with multiple sclerosis.
- Bertholf, T. (2008). Effects of an energy conservation course with persons with fibromyalgia and chronic fatigue syndrome.
- Russell E. (2008). Comparison of mobile arm supports for persons with upper extremity weakness due to multiple sclerosis.
- Goeke, R. (2007). Mobile arm supports for persons with upper extremity weakness: A single subject design.
- Zerr, W. (2007). Comparison of mobile arm supports in persons with upper extremity weakness due to amyotrophic lateral sclerosis.
- Frost, D. (2006). Effects of self-learning modules on fatigue impact for persons with multiple sclerosis.
- Shevlin, K. (2006). Effect of yoga on flexibility, fatigue impact, and perceived stress for persons with multiple sclerosis.
- Fair, J. (2005) Effects of self-learning modules on fatigue impact for persons with multiple sclerosis.
- Rufledt, W. N. (2005). Effects of an energy conservation course on community integration and self-efficacy of persons post-stroke

- Thompson, B. (2005). Evaluation of quizzes designed to measure treatment receipt of energy conservation course for persons with multiple sclerosis
- Billion, S. (2005). Effects of Rolyan ergonomic hand exerciser vs. Rolyan therapy putty on grip strength of persons with multiple sclerosis.
- McQuillan, A. (2005). Effects of an energy conservation course on fatigue severity.
- Snorteland, A. (2005). Effects of an energy conservation course on fatigue impact for an elderly person.
- Bloedel, K. J. (2005). Effects of an energy conservation course for persons post-stroke.
- Mahal, S. (2005). Parents' perspectives of a hippotherapy program.
- Peterson, J. (2004). Randomized controlled trial of hand-strengthening programs: HDS Stronghands versus Rolyan Progressive Putty.
- Liepold, A. (2004). Reliability and validity of the Self-Efficacy for Performing Energy Conservation Strategies Assessment for persons with multiple sclerosis.
- Busch, M. L. (2004). Participants' evaluation of an energy conservation course for persons with multiple sclerosis.
- Swanson, K. (2004). Effects of energy conservation self-learning modules on a person with cancer-related fatigue.
- Striegel, S. (2003). Effects of Rolyan® Progressive™ Putty vs. HDS Stronghands™ on hand strength and grip endurance.
- Kriz, L. (2003). Compliance with hand strengthening programs using HDS Stronghands™ vs. Rolyan® Progressive™ Putty.
- Carroll, G. L. (2002). Effectiveness of an energy conservation course on fatigue impact in persons with progressive multiple sclerosis: A follow-up study.
- Mehlhoff, S. (2002). Test-retest reliability of grip and pinch strength assessments for individuals with multiple sclerosis.
- DeSouza, S. (2002). Impact of perceived self-efficacy on the outcomes of an energy conservation course for persons with multiple sclerosis.
- Danforth, C. J. (2002). Lifestyle redesign for stroke survivors: A program proposal.
- Fischer, J. L. (2002). Component deficits post-stroke and activities of daily living: A systematic review.
- Coverston, A. (2001). Effects of volunteering on older adults: A systematic literature review.
- McGee, C. (2001). Relationship between upper extremity strength and instrumental activities of daily living performance among elderly women.
- Gilbertson, K. K. (2001). Effects of an energy conservation course on fatigue impact for persons with progressive multiple sclerosis.
- Danecki, S. L. (2001). Test-retest reliability of the role change assessment with persons post-stroke.
- Keifenheim, L. (2001). Characteristics of individuals with multiple sclerosis who benefited from participation in an energy conservation course.
- Vanage, S. (2000). Effects of an energy conservation course on fatigue impact for persons with progressive multiple sclerosis: A pilot study.
- Coulson, J. (1999). Functional outcomes for an acute inpatient rehabilitation program for adults post-stroke.
- Gallus, J. (1999). Test-retest reliability of the Purdue Pegboard for individuals with multiple sclerosis.
- Longhenry, C. (1999). Evaluation of the Neater Eater on persons with multiple sclerosis.

- Pernat, D. (1999). Neater Eater: An assistive feeding device for person with tremors due to multiple sclerosis.
- Bicknell, V. (2004). A pilot study of a fatigue management program for persons with HIV/AIDS-related fatigue.
- Humisten, L. (2000). Normative data for TEMPA: 20-29 year old adults.
- Reilly, M. (2001). Normative data for TEMPA: 20-29 year old adults.

### **Master's Thesis Projects Directed (College of St. Catherine)**

- Murphy, M. (1998). Effectiveness of an energy conservation course for adults with fatigue secondary to multiple sclerosis.
- Gowdy, S. E. (1997). The use of the GRE and GPA as admissions criteria in a professional master's occupational therapy program.
- Juenemann, B. (1997). A practitioner survey of energy conservation methods for multiple sclerosis.
- Rossakis, J. (1997). The relationship between performance components and self-care performance in individuals with multiple sclerosis.

### **Doctoral Dissertations Directed**

- Vos-Draper, Tamara, (2014-2018). Effectiveness of seat pressure mapping as biofeedback in spinal cord injured wheelchair users. Dissertation funded in part by her NIH grant.
- Yu, Chih-Huang "Jeffrey" (2010-2018) Efficacy of a forearm rotation orthosis for persons with a hemiparetic arm. Dissertation funded in part by Care Providers of MN grant.
- McGee, Corey (2007 – 2014). Hand Force Profiles of Women with Hand Osteoarthritis during Sealed Jar Opening. Dissertation funded in part by a MN Medical Foundation Grant.
- Al Mhdawi, Khader (2007 -2011). Effects of Occupational Therapy Task-Oriented Approach in Upper Extremity Post-Stroke Rehabilitation. Dissertation funded in part by Care Providers of MN grant.
- Plow, Matt (2002-2006). Comparing the effectiveness of a wellness course to prerehabilitation for people with multiple sclerosis. Funded by NIH dissertation grant.

### **Doctoral Students Advised**

See student names Doctoral Dissertations Directed above

### **Doctoral Committees Served on**

Hutson, Jenny, 2018  
 Anderson, Linda, 2018  
 Yeh, I-Ling, 2017  
 Schmidt, John 2002

### **Professional Student Activities OTD**

Stout, Kara (UIC OTD student), 2010

### **Other Mentoring Activities**

Mentoring of OT faculty new to RSc program, 2010- 2017

## **OT Coordinator of Rehabilitation Science Program**

Yearly Program Evaluation Reports on OT Role in RSc program (2012 – 2018)  
RSC Goals within OT Strategic Plan (2012 – 2017)

### **PROFESSIONAL SERVICE AND PUBLIC OUTREACH**

#### **Service to the Discipline/Profession/Interdisciplinary Area(s)**

*[Community, state, national, or international service activities]*

#### **Editorships/Journal Reviewer Experience**

Editorial Review Board of *American Journal Occupational Therapy*, 2002-2005  
Editorial Review Board of *Occupational Therapy Journal of Research*, 1991-93; 2011-14.  
Editorial Review Board of *Occupational Therapy International*, 1998 – 2002  
Manuscript Reviewer for *American Journal of Occupational Therapy*, and *Occupational Therapy Journal of Research*, *Occupational Therapy International*, 1983 - present.  
Manuscript Reviewer (one or more times each) for *Journal of American Medical Association*, *American Journal of Human Biology*, *Stroke: Journal of Cerebral Circulation*, *Archives of Physical Medicine & Rehabilitation*, *Perceptual and Motor Skills*, *Journal of Rehabilitation Research & Development*, *BMC Neurology Review*. *American Journal of Hand Therapy*, Etc. 1996- present

#### **Review panels for external funding agencies, foundations, etc.**

AOTF Grant Reviewer, 1986 - 2017.  
National Multiple Sclerosis Society (NMSS) Grant Reviewer, 2002-2015  
National Institute of Health (NIH), Grant Reviewer: Member of Musculoskeletal Rehabilitation Sciences Study Section, 2005 – 2007

#### **Program review experience**

AOTA: Content Reviewer of *Roles and Functions of Occupational Therapy in Orthotics*, 1986.

#### **Organization of conferences, workshops, panels, symposia**

Upper Extremity Anatomy Review Workshops, UMN, 1998, 2005, 2015

#### **Committee memberships [indicate if the candidate served as chair]**

Manpower Committee, 1986 National Conference.  
Academy of Research member since 2002; Chair 2011-2012.  
MOTA Steering Committee, 1989 State Conference  
MOTA Research Committee 1985 - 1990.  
MOTA Hand Therapy SIG, 1985 - 1991.  
Arthritis Foundation, Wisconsin Chapter, Professional Education Committee, 1983-1985.  
MOTA Co-Chairperson of Continuing Education Committee, 1978-80  
MOTA Liaison with Society of Hand Surgeons, 1976-1980.  
President – UMN Student Occupational Therapy Association, 1972-1973.

## **Public Advocacy**

## **Service to the University/AHC/CAHP/Program**

### **University of Minnesota: University-wide service**

Chair, Disabilities Issues Committee, 2004-2005  
 Disabilities Issues Committee, 2002-2004, 2012-2014  
 Co-Chair, Committee proposing Disability Studies major &/ minor, 1999-2005

## **AHC Service**

### **Department of PM&R**

Rehabilitation Science Graduate Program Committee, 1996 – 2018  
 PM&R Promotion & Tenure Committee, 1996-2016

### **CAHP Service**

CAHP Promotion & Tenure Committee, 1998-2018  
 CAHP Faculty Consultative Committee 2010-2014  
 Chair of CAHP Faculty Assembly, 2010-2012

### **OT Program Service**

Admissions Committee, 1996 - 2017  
 Curriculum Committee, 1996-2017  
 Scholarship committee, 2002-2010  
 Audit committee, Chair, 2005-2008

### **College of St. Catherine**

#### College:

Member, Library Advisory Committee, 1992-95.  
 Member, Search committee for Director of Physical Therapy, 1992  
 Member, Institutional Review Board for the Protection of Human Subjects, 1986-94  
 Acting Chair, Institutional Review Board for the Protection of Human Subjects, Fall, 1993.  
 United Way/Cooperating Fund Drive, committee member, 1991-92  
 Member Health-related Masters Programs Planning committee. 1988-90  
 Co-authored an Allied Health Project Grant: Graduate programs in Occupational and  
 Physical Therapy, US Department of Health & Human Services for \$224,240.  
 Faculty Observer at Board of Trustees meeting. 1994-95; 1989-90

#### Department:

Chair, OT Faculty Search committees (Hired 7 faculty positions). 1994 & 95  
 Chair, OT Support Staff Search committee (Hired 3 support staff). 1995  
 Chair, OT Curriculum committee. 1995  
 Chair, OT Admissions committee (processed 350 applications). 1995



Member, OT Faculty Search committee. 1993

Member or Co-chair, MA in OT committee, 1990-95

Co-authored proposal for Entry-level MA in OT.

Curriculum planning and revision committee. 1985-95

Co-Chair OT Graduate Program Committee. 1988-90

Co-authored the MA in OT proposal and help guide it through the approval processes at the College of St. Catherine.

Co-authored documents for the MN Higher Education Coordinating Board and North Central Association of Colleges and Secondary Schools.

### **Community Outreach Activities**

Volunteer, Special Needs Program at Spirit of St. Stephen's Catholic Community, Mpls, MN.

Monthly meetings and yearly retreats. 2010 –2018

Volunteer, basketball coach, Irondale Basketball Association, 1995 – 1999

Volunteer, camps & outdoor activities. Boy Scouts of America, 1995 – 2002.

Volunteer, basketball & softball coach, Merriam Park Community Center, 1990-1994.

Signature

Date: January 16, 2019



*Updated January 16, 2019*