

CURRICULUM VITAE

Carolyn R. Mason, PhD, PT
ASU Station #10923
San Angelo, Texas 76909-0923
(325) 942-2794
Physical Therapy Program, Angelo State University

Education: Northwestern University
Evanston, IL
1989 to 1996
Neuroscience
PhD/1996

Emory University
Atlanta, GA
1980 to 1983
Physical Therapy
MMSc/1983

Northwestern University
Evanston, IL
1976 to 1977
Physical Therapy
BS/1977

West Virginia University
Morgantown, WVA
1973 to 1976
Chemistry

Licensure Information/Registration Number: Texas License 1030831

Employment and Positions Held: **Program Director** **From 6/3/13 to present**
Professor From 2013 to present
Associate Professor From 2008 to 2013
Assistant Professor From 2003 to 2008
Graduate Faculty
Tenured
Angelo State University, Physical Therapy Program
San Angelo, TX
From 2003 to present

Research Associate
Non tenured
University of Minnesota, Neuroscience Department
Minneapolis, MN
From 2000 to 2003

NRSA Post Doctoral Fellow
Non tenured
University of Minnesota, Neuroscience Department
Minneapolis, MN
From 1997 to 2000

Post Doctoral Associate
Non tenured
University of Minnesota, Neurosurgery Research
Laboratories
Minneapolis, MN
From 1996 to 1997

Physiology Lab Assistant
Dr. Scholl's College of Podiatric Medicine
Chicago, IL
From 1990 to 1994

Instructor
Texas Woman's University, School of Physical Therapy
Houston, TX
From 1984 to 1986

Physical Therapist II
The Institute for Rehabilitation and Research
Houston, TX
From 1982 to 1984

Staff Physical Therapist
Gottlieb Memorial Hospital
Melrose Park, IL
From 1977 to 1980

Peer Reviewed Publications:

Hendrix CM, Mason CR, Ebner TJ. (2009) Signaling grasp dimension and grasp force in dorsal premotor cortex and primary motor cortex neurons during reach to grasp in the monkey. *Journal of Neurophysiology* 102: 132-145.

Theverapperuma LS; Hendrix CM; Mason CR, and Ebner TJ. (2006) Finger movements during reach-to-grasp in the monkey: amplitude scaling of a temporal synergy. *Experimental Brain Research* 169(4): 433-48

- Mason CR, Hendrix CM, and Ebner TJ. (2006) Purkinje cells signal hand shape and grasp force during reach-to-grasp in the monkey. *Journal of Neurophysiology* 95:144-158.
- Mason CR, Theverapperuma LS, Hendrix CM, and Ebner TJ. (2004) Monkey hand postural synergies during reach-to-grasp in the absence of vision of the hand and object. *Journal of Neurophysiology* 91:2826-2837.
- Mason CR and Ebner TJ. (2002) Neural control of reach-to-grasp. *Archives Italiennes de Biologie* 140:229-236.
- Johnson MTV, Mason CR, and Ebner TJ (2001). Central processes for the multiparametric control of arm movements in primates. *Current Opinion in Neurobiology* 11:684-688.
- Mason CR, Gomez JE, and Ebner TJ. (2001). Hand synergies during reach-to-grasp. *Journal of Neurophysiology* 86:2896-2910.
- Mason CR, Johnson MTV, Fu Q-G, Gomez JE, and Ebner TJ (1998) Temporal profile of the directional tuning of the discharge of dorsal premotor cortical cells. *NeuroReport* 9: 989-995.
- Mason CR, Miller LE, Baker JF, and Houk JC (1998) Organization of reaching and grasping movements in the primate cerebellar nuclei as revealed by focal muscimol inactivations. *Journal of Neurophysiology* 79: 537-554.
- Fu Q-G, Mason CR, Flament D, Coltz JD, and Ebner TJ (1997) Movement kinematics encoded in complex spike discharge of primate cerebellar Purkinje cells. *NeuroReport* 8:523-529.
- Mason CR and Baker JF (1989) Effects of optokinetic velocity and medial vestibulo-cerebellum lesions on vestibulo-ocular reflex adaptation in the cat. *Brain Research* 490: 373-377.
- Mason CR (1985) Possible method for assessing the effectiveness of fast brushing. *Physical Therapy* 65: 1197-1202.

Published Abstracts of Peer Reviewed Presentations:

- Black EJ, Mason CR. Monroe AD, Diminnie CB. Impact of a cognitive task on static and dynamic balance measures in university students. Program 184.06. 2011 Neuroscience Meeting Planner. Washington, DC: Society for Neuroscience, 2011. Online.
- Hendrix CM, Mason CR, Ebner TJ. Primary motor and premotor neurons signal hand shape and grasp force during reach-to-grasp in the monkey. Program 255.18. 2006 Neuroscience Meeting Planner. Atlanta, GA: Society for Neuroscience, 2006, Online.
- Trudeau JL, Mason CR. Hand Synergies During Reach-to-Grasp in Infants. Texas Physical Therapy Association Annual Conference, Fort Worth Texas, October 2006.
- Ulat FG, Mason CR. Characteristics of Reaching Within A 150 Degree Arc Of 5 And 6 Year Old Children. Texas Physical Therapy Association Annual Conference, Fort Worth Texas, October 2006.
- Howard R, Vela A, Mason CR. The Effect of Height on Functional Anterior and Lateral Reach. Combined Sections Meeting 2006. *Accepted*.
- Theverapperuma LS, Roitman AV, Mason CR, Hendricks CM and Ebner TJ. Motor cortex neural activity during grasping: representation of synergies. Program No. 708.17 *2003 Abstract Viewer/Itinerary Planner*. Washington, DC: Society for Neuroscience, 2003. Online.
- Theverapperuma LS, Mason CR and Ebner TJ (2002) Monkey's hand pre-shaping during grasp involves highly synchronized yet individualized finger movements. Neural Control of Movement 12th Annual Meeting.
- Mason CR, Theverapperuma LS, and Ebner TJ. Synchronized yet individualized finger movements characterize the monkey's preshaping during grasp. Program No. 665.7 *2002 Abstract Viewer/Itinerary Planner*. Washington, DC: Society for Neuroscience, 2002. Online.

- Mason CR and Ebner TJ (2001) What does the simple spike discharge encode during reach-to-grasp? *Soc. Neurosci. Abstr* Vol 27, Program 577.8.
- Mason CR, Gomez JE, and Ebner TJ (2000) Reach-to grasp movements in the monkey: Kinematic and primary motor cortex recordings. *Soc. Neurosci. Abstr* 26(2): 1577.
- Mason CR, Gomez JE, and Ebner TJ (1999) Simplifying strategies of whole hand grasp. Neural Control of Movement 9th Annual Meeting, Kauai, HA.
- Mason CR, Gomez JE, and Ebner TJ (1999) Simplifying strategy of human whole hand grasp as determined by singular value decomposition. *Soc. Neurosci. Abstr* 25(1): 113.
- Mason CR, Gomez JE, and Ebner TJ (1998) Simple spike modulation of primate cerebellar Purkinje cells encode object properties during grasp. Neural Control of Movement 8th Annual Meeting, Key West, FL.
- Mason CR, Gomez JE, and Ebner TJ (1998) Object properties encoded by simple spike discharge of primate cerebellar Purkinje cells during grasp. *Soc. Neurosci. Abstr* 24(2): 1406.
- Gomez JE, Mason CR, and Ebner TJ (1998) Relations of precentral neuron discharge to object and hand shape properties. *Soc. Neurosci. Abstr* 24(1): 404.
- Gomez JE, Mason CR, and Ebner TJ (1997) Responses of precentral cortical neurons during whole hand grasping. *Soc. Neurosci. Abstr.* 23(2): 1555.
- Mason CR, Miller LE, Lee JS, and Houk, JC (1995) Control of hand use and reaching accuracy by anterior and posterior nucleus interpositus. *The Cerebellum: From structure to control. Satellite of the Annual Mtg., European Society for Neuroscience.*
- Mason CR, Carter RR, Baker JF, and Houk JC (1994) Differential contributions of nucleus interpositus anterior and posterior during reaching tasks in the macaque. *Soc. Neurosci. Abstr.* 20(2): 1746.
- Mason CR, Carter RR, Houk JC, and Baker JF (1991) Alteration in pointing and hand control produced by prism adaptation and by interpositus inactivation in the monkey. *Soc. Neurosci. Abstr.* 17(2): 1028.

Abstracts (that were not presented):

- Mendez E, Smith S, Mason CR. A Case Report: The Effects of a Constraint Induced Movement Therapeutic Day Camp on a Seven Year Old Child, PT 2006. *Accepted.*
- Escue JD, Harris M, Mason CR. Rhythmic Auditory Stimulation Exercise/Walking Program in a Person with Chronic Hemiplegia, PT 2005. *Accepted.*

Non-Peer Reviewed Presentations:

- Let's Keep Moving. Prepared for the Multiple Sclerosis Professional Education Day 2011: Therapies, Treatment, Movement. September 30, 2011. Sponsored by the National Multiple Sclerosis Society. *Cancelled due to inadequate registration.*
- Mason CR, Hartnell RH, Blackburn R. Management of the Patient Following a CVA, Continuing Education course, September 11, 2010 San Angelo Community Medical Center. Sponsored at West Texas Training Center.
- Use of the Wii as Part of Your Exercise Routine: How to Adapt the Gaming Format so that All Can Play. Concho Valley Parkinson's Disease Support Group, June 29, 2010.
- Neuro-Developmental Treatment. Angelo State Physical Therapy Symposium 2009. April 25, 2009, San Angelo, TX.
- Exercise Made Easy. *A Day Just For You.* July 11, 2008 National Kidney Foundation, San Angelo, TX.

Medley A, Mason CR, Buetal S. Linking Movement Science and Intervention: III STEP Summary Seminar, April 8, 2006. Midwest District Continuing Education Seminar 4.5 hours.

Journey through the Gait Lab. November 9, 2005. Midwest District Meeting of the Texas Physical Therapy Association.

Control of Grasp: From Research to the Clinic. July 16, 2004. Midwest District Meeting of the Texas Physical Therapy Association.

Cerebellar Purkinje cell activity during reach to grasp in the monkey. April 15, 2003. Department of Physical Therapy, Angelo State University, San Angelo, TX. (Sponsor: Trish Hutchinson, PhD).

Control of Grasp: Evidence of a Simplifying Strategy. July 12, 2002. Dept. of Physical Therapy, Angelo State University, San Angelo, TX (Sponsor: Shelly Weise, EdD, PT)

The Motor Cortex, the Cerebellum, and the Hand: How does the CNS control grasp? Jan. 28, 2002 Dept. of Physical Therapy, Georgia State University, Atlanta, GA, (Sponsor: Carolyn Crutchfield, PhD, PT).

The Motor Cortex, the Cerebellum, and the Hand: How does the CNS control grasp? Oct. 1, 2001 Dept. of Physical Therapy Education, Kansas University Medical Center, Kansas City, KA (Sponsor: Chukuka Enwemeka, PhD, PT).

Neural control of reach-to-grasp. Sept. 27, 2001. Brainerd 2001: Systems Analysis in Neurophysiology, Brainerd, MN.

Basal ganglia dysfunction: Parkinson disease and Huntington's disease. April 10 and 12, 2001 in PMed 5282 Theory of Therapeutic Exercise. Program in Physical Therapy, Dept. of Physical Medicine and Rehabilitation, University of Minnesota Medical School (Course director: James Carey, PhD, PT).

Grasp studies in human and nonhuman primates. July 28, 2000. Center for Health Sciences, Clarkson University, Potsdam, NY (Sponsor: Samuel B. Feitelberg, MA, PT).

Grasp studies in human and nonhuman primates. July 12, 2000. Program in Physical Therapy, Dept. of Physical Medicine and Rehabilitation, University of Minnesota Medical School (Sponsor: LaDora Thompson, PhD, PT).

Basal ganglia dysfunction: Parkinson disease and Huntington's disease. April 4 and 6, 2000 in PMed 5282 Theory of Therapeutic Exercise. Program in Physical Therapy, Dept. of Physical Medicine and Rehabilitation, University of Minnesota Medical School (Course director: James Carey, PhD, PT).

Grasp studies in human and nonhuman primates. October 21, 1999. Division of Physical Therapy, School of Health Related Professions, University of Alabama at Birmingham (Sponsor: Jo Clelland, PT).

Grasp studies in human and nonhuman primates. April 6, 1999. School of Physical Therapy, Ohio University, Athens, Ohio (Sponsor: Averell Overby, PhD, PT).

Grasp studies in human and nonhuman primates. March 29, 1999. School of Physical and Occupation Therapy, Mc Gill University, Montreal, Canada. (Sponsor: Patricia McKinley, PhD).

Grasp studies in human and nonhuman primates. Feb. 24, 1999. Neuroscience Colloquium, University of Minnesota.

Neural representations of whole hand grasp in the motor cortex and cerebellar cortex. October 2, 1998. Human Frontiers in Science Project. ATR, Kyoto, Japan

Control of reaching movement and hand use by the intermediate cerebellum. February 22, 1996. Physical Therapy Education Program, College of Health and Human Development Sciences, University of Illinois at Chicago (Sponsor: Suzann K. Campbell, PhD, PT).

Deficits observed during inactivations of the nucleus interpositus anterior or posterior of the macaque.

September 21, 1995. Neurosurgery Department, University of Minnesota, (Sponsor: Timothy J. Ebner, MD, PhD).

Funded Grant Activity:

Principal Investigator
\$219,106
Motion Analysis Laboratory
September 2003, San Angelo Health Foundation

National Research Service Award Post Doctoral Fellowship
National Institutes of Health
1997 to 2000

Peer-Reviewer

Referee for *Journal of Neurophysiology*, 1997 to present
Referee for *Brain Research* 2006

Membership in Scientific/Professional Organizations:

Society for Neuroscience
American Physiological Society
Movement Disorder Society
American Physical Therapy Association

- Neurology Section
- Education Section

Texas Physical Therapy Association

- Secretary, TPTA Executive Council, November 2006 – 2009
- Reference Committee October 2006 - 2008
- Secretary/Treasurer, Midwest District, July 2003 to December 2006
- Midwest District Delegate to APTA House of Delegates, 2004 to 2009
- Peer Reviewer for Continuing Competency Courses, 2004 to present
- Continuing Education Approval Program Ad hoc Task Force May 2008 to 2009

Community Service:

Brain Awareness Week activities with grade school students, 1996 through 2002
Brain Day, Minnesota State Fair, 1997 to 2002
NIH Research Apprentice Program Mentor, 1996 and 1998
Concho Valley Master Gardener, President 2009 to 2012
San Angelo Day Nursery Board of Directors

- Member 2007 to present
- President 2009 to present

Girl Scout Expand Your Horizons STEM event – 2010, 2011, 2012, 2013, 2014

Services to the University/College/School on Committees/Councils/Commissions:

University-wide: Angelo State University:

ADA Committee on Accessibility of Facilities and Services for the Disabled, 2003 to 2008

Academic Excellence Award Committee 2005 to 2011

Research Enhancement Committee 2006 to 2008, 2009-2012

Ad hoc Committee to review language and requirement, 2012

University Review Committee 2008 to 2011

Honors Council 2006 to 2011

Relation Subcommittee chair 2008 to 2011

Tenure and Promotion Committee 2009-2010

University Curriculum Committee 2012-2013

College of Health and Human Services

Tenure and Promotion Committee 2011-2013

College Curriculum Committee 2011-2015

College of Nursing and Allied Health, Angelo State University

College Curriculum and Courses Committee 2008 to 2011

Strategic Planning Committee 2008 to 2011

Tenure and Promotion Guidelines Committee 2010

College of Sciences, Angelo State University:

Curriculum Committee, 2004 to 2008

Committee on Committees, 2005

Department of Nursing and Rehabilitation Sciences

Tenure and Promotion Committee 2011-2012

Curriculum Committee 2011 to 2014

Physical Therapy Program

Curriculum Committee 2012-2015

Neuromuscular Faculty Search Committee Co-chair 2011-2012

Physical Therapy Department, Angelo State University:

Academic Committee, 2003 to 2011

Admission Committee, 2003 to 2011

Promotions Committee, 2003 to 2011

Pediatric Faculty Search Committee, Co-chair, 2003 to 2004

Faculty Search Committee Chair, 2004 to 2005

Library Coordinator, 2003 to present

Curriculum Committee, 2003 to 2005

Co-chair 2004 to 2005

Department Head Search Committee, 2004

Honors and Awards:

Elected Secretary of the Texas Physical Therapy Association 2006 – 2009
Elected Delegate to the American Physical Therapy Association House of Delegates, 2003 – 2008
Teaching Excellence Award, Angelo State University, 2006-2007
College of Nursing and Allied Health Faculty Excellence in Leadership/Service Award, 2010
ASU Gary and Pat Rodgers Distinguished Faculty Nominee, 2010-2011, 2012-2013
ASU Faculty Excellence in Teaching Award 2012

Continuing Education Attended (last five years):

- 3/09 Item Writing and Test Development Workshop for National Physical Therapy Examination, Federation of State Boards of Physical Therapy, Alexandria, VA (22 contact hours)
- 6/09 Involvement in the Profession of Physical Therapy Attainment of Vision 2020, APTA (15 contact hours)
- 6/09 APTA PT 2009
The 40th McMillan Lecture – The Best We Can Be is Yet to Come. (1 contact hour)
Why All Physical Therapists Should Know About Wound Management (3 contact hours)
- 09/09 Hamstring Tendonopathy: Evidence Supported Diagnosis and Rehabilitation, TPTA MWD (1 contact hour)
- 10/09 Wound Care for the Generalist, TPTA 2009 Annual Conference (3 contact hours)
- 11/09 Overview of the Ankle and Foot, TPTA MWD (1 contact hour)
- 01/10 Sudden Cardiac Death in Athletes, TPTA MWD (1 contact hour)
- 02/10 Gaming Augmented Physical Therapy: Beyond the Wii. APTA Combined Sections Meeting (11.75 contact hours).
- 02/10 APTA Combined Sections Meeting, San Diego, California
Concussions and Mild Traumatic Brain Injury: Update 2010 (2 contact hours)
Evidence-based Medicine: Multiple Sclerosis Drugs and Exercise Implications (3.25 contact hours)
The Prognostic Value of Electromyography and Nerve Conduction Testing for Clinical Outcomes and Function (1.5 contact hours)
Benign Paroxysmal Positional Vertigo: Theory, Evidence and Practical Application (2 contact hours)
Pain and the Brain (The Body in Mind) (3 contact hours)
Assessing Walking Speed in Everyday Clinical Practice: A “Vital Sign” for Function. (3.75 contact hours)
- 10/10 LSVT® BIG Training and Certification Workshop, LSVT Global, Houston Texas (12 contact hours)
- 10/10 Pilates!! More than Exercise: Principles to enhance your current exercise practice (PT) TPTA 2010 Annual Conference, (7 contact hours)
- 02/11 APTA Combined Section Meeting, New Orleans, LA
Aquatic Neurorehabilitation Pre-Conference Course (8.0 contact hours)
- 05/11 Ethics and Professional Responsibility in Physical Therapy Practice, TPTA through SeminarWeb (2 contact hours)
- 01/12 Promoting Early Mobilization in the ICU, TPTA MWD meeting (1 contact hour)
- 02/12 APTA Combined Section Meeting, Chicago, IL

- A Comprehensive Approach to Evidence-Based Rehabilitation of Patients with Parkinson Disease across the Continuum of Disability (16 contact hours)
- It's All in the Family: Instructional Collaboration using and Integrated Longitudinal Case-Based Learning Model (2 contact hours)
- The Neurological Impact of Forced Exercise in Parkinson Disease (2 contact hours)
- 05/12 Fraud and Abuse: It's Every Practitioner's Concern, ASU, (1 contact hour)
- 10/12 Which Came First? The Fall or the Fear of Falling. TPTA 2013 Annual Conference, (2 CCUs)
- Survival Spanish for the PT and the PTA, TPTA 2013 Annual Conference, (7 CCUs).
- 05/13 Defense of Case Reports and Research Project by the Graduating Angelo State University DPT Class of 2013, Angelo State University, (2 CCUs).
- 06/13 Ethics and Professional Responsibility in Physical Therapy Practice, Texas Physical Therapy Association, (2 CCUs).
- 09/13 Cerebrovascular Neurosurgery: The Good, The Bad, and The Ugly. TPTA MWD meeting (1 contact hour)
- 11/13 Cervical Radiculopathy – A Clinician's Guide. ASU Lunch and Learn (1 contact hour)
- 11/13 Complex Regional Pain Syndrome. TPTA MWD meeting (1 contact hour)
- 12/13 Ethical Decision Making and the Use of Social Media. ASU DPT (2 contact hours)
- 02/14 Gait Speed and Its Implications – A Clinician's Guide. ASU Lunch and Learn (1 contact hour)
- 03/14 LSVT BIG Certification Course, Houston TX. (12 contact hours)
- 04/14 Physical Therapy Faculty Summit, TTUHSC, Lubbock, TX. (7.5 contact hours)
- 04/14 Thriving beyond criticism – ASU Lunch and Learn. (1 contact hour)

Current Teaching Responsibilities in the Entry-level Physical Therapy Program:

- PT 7320 – Foundation in Clinical Pathology, fall, Year 1 of DPT Program
- PT 7212 – Introduction to Neuroscience Concepts, summer, Year 2 of DPT Program
- PT 7224 – Neuropathology I, fall, Year 2 of DPT Program
- PT 7325 – Neuropathology II, spring, Year 2 of DPT Program
- PT 7235 – Disability Studies, spring, Year 2 of DPT Program
- PT 7655 – Neuromuscular Examination and Management, fall, Year 3 of DPT

Updated 09/13/14
CRM