



Catherine Siengasukon

Research Assistant Professor

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Education

University of Kansas Medical Center, Kansas City, KS

- PhD in Rehabilitation Science with Honors January 2005-May 2008

Rockhurst University, Kansas City, MO

- Master of Physical Therapy Degree May 2002
- Bachelor of Science in Biology May 2000
- Minor in Psychology May 2000

Research Experience

- Dissertation research examining role of sleep in learning following stroke, University of Kansas Medical Center, Fall 2006-May 2008
- Research Assistant for Lara Boyd, PhD, PT, University of Kansas Medical Center, Fall 2005-May 2008
- Research Assistant for Pat Pohl, PhD, PT, University of Kansas Medical Center, Fall 2005-Spring 2007
- Stroke database project manager, University of Kansas Medical Center, Spring 2005

Teaching or Mentoring Experience

- **Research Assistant Professor** in Department of Physical Therapy and Rehabilitation Sciences, University of Kansas, June 15, 2008-present
- **Instructor** for Clinical Pathophysiology class in Doctorate of Physical Therapy Curriculum at Rockhurst University, Summer 2008
- **Teaching Assistant** for Neuroscience class in Doctorate of Physical Therapy Curriculum at the University of Kansas, Fall 2006
- **Research Mentor** for two Doctorate of Physical Therapy during their Research Practicum, Jan – Aug, 2006
- **Teaching Assistant** for the PT Tests and Measures class in Doctorate of Physical Therapy Curriculum at the University of Kansas, Summer 2005
- **Teaching Assistant** for the Therapeutic Interventions class in Doctorate of Physical Therapy Curriculum at the University of Kansas, Spring 2005
- **Clinical Instructor** at Baptist-Lutheran Medical Center, Kansas City, MO, 2/04—3/04

Awards/Honors

- Defended dissertation with honors, 4/9/08
- Recipient of Promotion of Doctoral Studies (PODS) II scholarship from the Foundation for Physical Therapy, 6/6/07
- Completed comprehensive exam with honors, 10/16/06

- Recipient of Promotion of Doctoral Studies (PODS) I scholarship from the Foundation for Physical Therapy, 5/23/06
- KUMC Student Research Forum award for School of Allied Health, 4/6/06

Peer-Reviewed Publications

- **Siengsukon CF** & Boyd LA. (2008). Sleep enhances implicit motor skill learning in individuals post-stroke. *Topics in Stroke Rehabilitation*, 15(1), 1-12.
- Boyd LA, Vidoni ED, & **Siengsukon CF**. (2008). Multidimensional motor sequence learning is impaired in older but not younger or middle aged adults. *Journal of Physical Therapy*, 88(3), 351-362.

Publications in Preparation

- **Siengsukon CF** & Boyd LA. Sleep to learn after stroke: implicit and explicit off-line motor learning. *Stroke*, submitted.
- **Siengsukon CF** & Boyd LA. Sleep enhances off-line spatial and temporal motor learning after stroke. *Learning & Memory*, to be submitted April 2008.
- **Siengsukon CF** & Boyd LA. The impact of acquired explicit knowledge on implicit motor sequence learning, *Human Movement Science*, in revision.
- Boyd LA, **Siengsukon CF**, & Vidoni ED. Complex sequence learning remains intact following stroke but ability to transfer is impaired. *Journal of Experimental Psychology-Learning, Memory, Cognition*, in revision.

Peer-Reviewed Abstracts

- **Siengsukon CF** & Boyd LA. (2007). Sleep enhances motor skill memory consolidation in individuals post-stroke. *Journal of Neurologic Physical Therapy*. 31(4): 218.
- **Siengsukon CF** & Boyd LA. (2007). The role of sleep and instruction in motor memory consolidation following stroke. Society for Neuroscience Abstracts.
- Pohl PS, Kemper S, Boyd L, **Siengsukon CF**, Herman RE, & Vidoni E. (2007) The cost of doing two things at once after stroke: deficits in ambulation, hand movements and speech. *Journal of Neurologic Physical Therapy*. 31(4): 218.
- Boyd LA, Vidoni ED, **Siengsukon, C.** (2007). The impact of age and stroke on complex motor sequence learning, *Physiotherapy*, 93(S1), S61.
- Boyd LA, Vidoni ED, **Siengsukon, C.** (2007). Middle cerebral artery stroke impairs transfer for learning for complex but not simple motor sequences. *Journal of Neurologic Physical Therapy*, 30(4), 203-204.
- **Siengsukon CF** & Boyd LA. (2006). The role of sleep and knowledge in motor skill learning. *Journal of Neurologic Physical Therapy*. 30(4): 204.
- Boyd LA, Vidoni ED, **Siengsukon, C.** (2006). Complex motor sequence learning and transfer are impaired in older but not younger adults. *Journal of Sport & Exercise Psychology*, 28, S38.

Presentations

- "Sleep Enhances Motor Skill Learning and Memory Consolidation in Individuals Post-Stroke" at Graduate Research Forum at the Capitol, Topeka, KS, poster presentation, 3/13/08
- "Sleep Enhances Motor Skill Learning and Memory Consolidation in Individuals Post-Stroke" at American Physical Therapy Combined Sections Meeting, Nashville, TN, poster presentation, 2/8/08
- "Neuroimaging" for Neurologic PT II in Doctorate of Physical Therapy Curriculum at KUMC, 11/13/07
- "The Role of Sleep and Instruction in Motor Memory Consolidation Following Stroke" at Society for Neuroscience Annual Meeting, San Diego, CA, poster presentation, 11/5/2007
- "The Role of Sleep in Learning" at American Stroke Foundation, 8/9/07
- "The Role of Sleep in Learning" at North Kansas City stroke support meeting, 6/19/07

- "Recovery After Stroke: The Plastic Brain" at North Kansas City stroke support meeting, 3/20/07
- "The Impact of Acquired Explicit Knowledge of Motor Sequence Learning" at Student Research Forum, KUMC, 4/9/07
- "The Role of Sleep in Learning" at The Rehabilitation Institute, 3/5/07
- "The Role of Sleep and Knowledge in Motor Skill Learning" at American Physical Therapy Combined Sections Meeting, Boston, MA, platform presentation, 2/17/07
- "The Basal Ganglia and the Thalamus" for Neuroscience class in Doctorate of Physical Therapy Curriculum at KUMC, 11/2/06
- "Health Promotion for Patients with Multiple Sclerosis and Parkinson's Disease" for Health Promotion class in Doctorate of Physical Therapy Curriculum at KUMC, 7/10/06
- "What is the Role of Sleep and Knowledge in Motor Skill Learning?" at Student Research Forum, KUMC, 4/6/06
- "How Does Sleep Affect Motor Skill Learning Following Stroke?" at American Stroke Foundation, 9/26/05

Clinical Experience

Professional Rehabilitative Services- outpatient, part-time
 May 18, 2004—present
 Kansas City, KS

Baptist-Lutheran Medical Center- outpatient, full-time
 September 2, 2002—April 6, 2004
 Kansas City, MO

Professional Licenses and Membership

- Hold current license to practice Physical Therapy in Missouri (2002021164) and Kansas (5003333)
- Member of American Physical Therapy Association and Neurology Section
- Member of Society for Neuroscience