



Rehabilitation Sciences Doctoral Program

University of Kentucky

Spring 2006



News

Welcome, Dr. Richard Andreatta!!

Dr. Richie Andreatta will be joining the Rehabilitation Sciences faculty in July. He received his Ph.D. in Speech Physiology & Neuroscience from Indiana University, Bloomington. He has served as a tenured professor at the University of Georgia's Department of Communication Sciences and Disorders. Dr. Andreatta's research interests lie in understanding the effects that movement-related somatosensation or externally-generated afference may have on central nervous system processes of perception, sensorimotor control and proprioception in the oral-facial system of humans.

Dr. Andreatta is originally from New Jersey and NYC and grew up on the Palisades overlooking the Hudson River. He completed his undergrad at IU- Bloomington, where he majored in instrumental performance (classical trombone). He's a huge IU basketball fan. Family wise, he's married to a wonderful woman-Jane- who is also a speech pathologist, and they have three great children: Jonah (9), Joshua (5) and Madeline (6 months old)...and they are his hobby! They also have an 11 year old golden retriever named Zoe, who is really his first child... she thinks she's human.

Welcome, Dr. Dana Howell!!

Dr. Dana Howell will be joining the OT faculty at ECU. She received her Ph.D. in Adult Education from the University of Idaho. Prior to joining Eastern Kentucky University, she served as associate professor and director of the Occupational Therapy Department at Idaho State University. Dr. Howell's research interests include interdisciplinary education of OT and PT students and quality of life in rural elderly. Before completing her Ph.D., Dr. Howell received her BS in Occupational Therapy from Colorado State University and her OTD from Creighton University.

Dr. Howell's dad was in the air force, so she was born in Canada and moved around a bit as a kid (mostly in the western US). After starting work as an OT, she worked as a traveling therapist and has moved around as an adult as well, though Kentucky and the surrounding area is one part of the country she has not spent much time in. She has two dogs and two cats (and is not really looking forward to driving with all of them from Idaho to Kentucky in July). Her parents live in Oregon but have decided to move to Kentucky with her so that they can be closer. Dr. Howell's hobbies include walking the dogs and other exercise, watching hockey, quilting, home improvement, and reading.

Congratulations, Dr. Lovelace!!

We would like to congratulate Dr. Sherri Lovelace for successfully defending her dissertation "The Role of Book Type in the Retention of Novel Vocabulary among African American Children with Vocabulary Deficits".

Dr. Deem- New DGS

Dr. Deem is the new RSDP Director of Graduate Studies. From now on she will be handling admissions and all graduation issues. Thanks, Dr. Deem!

Congratulations, Dr. Kitzman!!

Dr. Kitzman has earned tenure and promotion to Associate Professor.

Presentations and Publications

Translational Research: The New Face of Rehabilitation Sciences Research

Dr. Stemple and Lisa Thomas have been busy this spring learning the language and ways of bench scientists. Last fall, Dr. Stemple became acquainted with Dr. Francisco Andrade in the Department of Physiology. Both shared a common research interest – the vocal fold. Over the years, however, the two had approached their research of the vocal fold in drastically different ways. Dr. Stemple, a clinical researcher, had examined clinical methods of rehabilitating the vocal fold. Dr. Andrade had examined the biochemistry of the vocal fold muscle in the rat model. Despite their different approaches, the two quickly realized the potential of a collaborative and translational approach to study of the vocal folds.

As part of the collaborative effort, Dr. Andrade agreed to mentor Lisa Thomas through a research experience in his physiology lab. The pair examined the effects of muscular dystrophy (MD) on the laryngeal muscles of mice. Dr. Andrade and Lisa became the first to examine the effects of MD on the laryngeal muscles and the first to use the mouse as a model for studying genetic diseases in the larynx. The study revealed that the laryngeal muscles are one of only a few sets of skeletal muscles not affected by dystrophin-deficiency. The results highlighted the unique make-up of the laryngeal muscles

and their importance for study. Dr. Andrade and Lisa are planning to publish their results later in the summer and present their findings at the annual convention of the American Speech-Language-Hearing Association in November.

Plans are forming for additional translational research projects between Rehabilitation Sciences and Physiology in the Summer. Dr. Andrade, Dr. Stemple, and Lisa will be studying unique aspects of the aging vocal fold muscle. Their work will focus on alterations in the mitochondria and myosin heavy chain isoforms in the aged thyroarynoid muscle and the implications of such changes for voice and swallowing function.

Presentations

Bolgia LA, Malone TR, Uhl TL, Umberger B. Hip and knee strength, EMG activity, and kinematics in subjects with patellofemoral pain syndrome. APTA Combined Sections Meeting, San Diego, CA, February 2006.

Blakeney A. National standards for cultural competence: Implications for Appalachia. Appalachian Studies Association Annual Conference, Dayton, Ohio, March 2006.

Effgen S. Pediatric practice forum: Complementary and alternative interventions. APTA Combined Sections Meeting, San Diego, CA, Feb 2006.

Blakeney A, Marshall A. Appalachian coal fields: Occupational justice in practice. AOTF research colloquium and tea – health disparities: Research promoting social justice. AOTA Annual Conference, Charlotte, NC, April 28, 2006.

Ellis KC. Working with speech-language

pathology assistants. Kentucky Speech-Language Hearing Association Annual Conference, Louisville, KY, Feb 2006.

English T, Seireveld E, Wheeldon B, Zoll C. Comparative study of clinical trunk stability test vs. isokinetic testing. APTA Combined Sections Meeting, San Diego, CA, Feb 2006.

Harrison A, Shaffer S, Kelly D, English L, Darbee J, Brennan K, Brown K, Damron A, Eakin R, Jackson M. The use of a health promotion fair in the education of physical therapy students. APTA Combined Sections Meeting, San Diego, CA, Feb 2006.

Kiesel K, Underwood F, Uhl T, Nitz A. Poster - The use of ultrasound imaging to measure select trunk muscle activation during induced pain. APTA Combined Sections Meeting, San Diego, CA, Feb 2006.

Kleinhaus K. Enhancing communication outcomes for students with complex communication needs. Regions 14 & 16 Spring Speech Meeting, Barren River State Park, March 14, 2006.

Kleinhaus K. Enhancing outcomes for individuals with developmental disabilities. South Carolina Speech-Language Hearing Association Annual Convention, Myrtle Beach, SC, March 3, 2006.

LaForme A, Effgen S. Use of groups in pediatric physical therapy. APTA Combined Sections Meeting, San Diego, CA, Feb 2006.

Malone T. Advances in knee rehabilitation: Clinical pearls following meniscal repair. APTA Combined Sections Meeting, San Diego, CA, Feb 2006.

Marshall A, Pierce D. PRISYM: Building regional occupation-based programming for adolescents. AOTA Annual Conference, Charlotte, NC, April 28, 2006.

Myers CT. The Role of Occupational Therapists in Early Childhood Transitions. AOTA

Presentations & Publications

Annual Conference, Charlotte, NC, April 2006.

Nitz A. Clinical specialist forum: Complex patient cases: Management discussion with clinical specialists. APTA Combined Sections Meeting, San Diego, CA, Feb 2006.

Polmateer K, Wirz P. Effective leaders as effective persons: The disposition to lead. 58th Annual Meeting of the American Association of Colleges of Teacher Education, San Diego, CA, January 2006.

Shaffer S, Harrison A, Brennan K, Brown K. Reliability and validity of Semmes-Weinstein monofilament testing in older community-dwelling adults. APTA Combined Sections Meeting, San Diego, CA, Feb 2006.

Shasby S, Schneck C. The handwriting without tears program: Efficacy with first grade students. AOTA Annual Conference, Charlotte, NC, April 2006.

Splinter-Watkins K, Harris L. Factors affecting the therapeutic movement of the horse in hippotherapy. North American Riding for the Handicapped Association Region 4 Conference, Lexington, KY, March 2, 2006.

Stemple J. The professional voice. UK College of Fine Arts Voice Pedagogy Class, December 6, 2005.

Stemple J. Functional organization of voice: Speech and language systems, and integration of function. UK Department of Physiology Sensory Neurobiology Journal Club, January 10, 2006.

Stemple J. The aging voice: Current trends and future directions in research. UK Department of Physiology Lung Biology Study Group, Feb 2, 2006.

Stemple J. The aging voice: Current trends and future directions in research. UK Sanders-Brown Center on Aging Friday Seminar Series, Feb 24, 2006.

Stemple J. Principles of physiologic voice therapy. Idaho Speech-Language-Hearing Association, Boise, ID, March 4, 2006.

Stemple J. From the mouths of babes: Phonotrauma and other voice disorders of children. Englewood Hospital and Medical Center, Englewood, NJ, March 12, 2006.

Stemple J. The role of clinical voice pathology in the care and management of voice disorders. UK Department of Otolaryngology Grand Rounds, March 29, 2006.

Uhl T. Integrated shoulder rehabilitation: Scapular mechanics and assessment. 2006 Baseball Team Medicine Conference, Atlanta, GA, Jan 2006.

Uhl T. Scapular dyskinesis: Evaluation, intervention and return to sport; Pathomechanics of the scapula; Evaluation laboratory; Scientific evidence of special tests of the shoulder and scapula; Integrating the kinetic chain into shoulder rehabilitation; Treatment laboratory; Evidence to support interventions. Pre-conference Program of the Sports Physical Therapy Section, APTA, San Diego, CA, Feb 2006.

Uhl T. Bracing and taping for the unstable shoulder. APTA Combined Sections Meeting, San Diego, CA, Feb 2006.

Uhl T. Early rehabilitation goals and techniques. Lexington Clinic Foundation, Total Joint Arthroplasty, Lexington, KY, March 2006.

Uhl T. 1-Day CEU course: Evaluation and rehabilitation of the shoulder. Western Kentucky University, Bowling Green, KY, Feb 2006.

Uhl T. Shoulder assessment and rehabilitation: An evidence based approach. Steadman-Hawkins Clinic of the Carolinas and Pivotal Therapy, Spartanburg, SC, March 2006.

Ware SK, Pugh T, Spencer-Skaggs C, Viperman J. Aspirin prevents the cutaneous vasodila-

tion caused by electrical stimulation. *FASEB J* 20 (4): A283 (Abstract), 2006.

Ware SK. Teaching physiology to health sciences students using interactive television. *FASEB J* 20 (4): A14. (Abstract), 2006.

Ware SK, Adams-Dutton J, Adams M, Jones-Morgan A, Wolfe J. Age and the cutaneous vascular response to heat and ischemia. *FASEB J* 20 (5): A1404 (Abstract), 2006.

Wright HH, Capilouto GJ, Carrico J, Seiver C. Impact of manipulating task instructions on narrative discourse performance. Clinical Aphasiology Conference, Gent, Belgium, June 2006.

Youse KM, Coelho C. Attention training as a means for improving conversational discourse following closed-head injury. 34th Annual Meeting of the International Neuropsychological Society, Boston, MA, Feb 2006.

Publications:

Bolgia LA, Malone TR, Uhl TL, Umberger B. Hip and knee strength, EMG activity, and kinematics in subjects with patellofemoral pain syndrome. *Journal of Orthopaedics and Sports Physical Therapy* 36(1):A67, 2006.

Blakeney A. Educating culturally sensitive health professionals in Appalachia. In S.E. Keefe, Ed. *Appalachian cultural competency: A guide for medical, mental health, and social service professionals*. Knoxville: The University of Tennessee Press, 2005.

Blakeney A. Health care in Appalachia. In Edwards G.T, Asbury JA, & Cox RL, Eds. *A Handbook to Appalachia*. Knoxville: The University of Tennessee Press, 2006.

Capilouto GJ, Wright HH, Wagovich S. Reliability of main event measurement in the discourse of individuals with aphasia. *Aphasiology*, accepted for publication.

Kiesel KB, Underwood FB, Uhl TL, Nitz AJ. Abstract: The use of ultrasound imaging to measure select trunk muscle activation during

Presentations & Publications Contd.

induced pain. *Journal of Orthopaedics and Sports Physical Therapy* 36(1):A46, 2006.

Kitzman P. Changes in vesicular glutamate transporter 2, vesicular GABA transporter and vesicular acetylcholine transporter labeling of sacrocaudal motoneurons in the spastic rat. *Experimental Neurology*, 197, 407-419, 2006.

Kleinert J, Gonzalez L, Schuster J, Huebner R. A comparison of syntax training for students with developmental disabilities utilizing clinician-directed versus self-determined session paradigms. *Education and Training in Developmental Disabilities*, March 2007, in press.

Kluemper MJ, Uhl TL, Hazelrig H. Stretching and strengthening: Their effects on forward shoulder posture in competitive swimmers. *Journal of Sports Rehabilitation* 15(1):58-70, 2006.

Marshall RC, Capilouto GJ, McBride J. Treatment of problem solving in Alzheimer's disease: A short report. *Aphasiology*, accepted for publication.

Marshall RC, Freed DB. The personalized cueing method: From the laboratory to the clinic. *American Journal of Speech Language Pathology*, in press.

Marshall RC, McGurk SA, Karow CM, Kairy TJ, Flashman LA. Performance of subjects with and without severe mental illness on a clinical test of executive function. *Schizophrenia Research*, in press.

Myers C, Effgen S. Physical therapists' participation in early childhood transitions. (Accepted for publication in *Pediatric Physical Therapy*.)

Shordike A, Pierce D. Cooking up Christmas in Kentucky: Occupation and tradition in the stream of time. *Journal of Occupational Science*, 12, 3, 140-148, 2005.

Tompkins CA, Scharp TJ, Marshall RC. Communicative value of self-cues in aphasia.

Grant Activity/Awards

Bolgia L. Excellence in research award in Sports PT 2006. American Physical Therapy Association Combined Section Meeting, San Diego, CA, Feb 2006.

Effgen S. Effect of intensive physical therapy on the acquisition of new gross motor skills in children with disabilities. Amount Funded: \$10,000

Kiesel K, Underwood F, Nitz A, Mattacola C. A comparison of select trunk muscle thickness change between acute low back pain subjects classified in the treatment based classification system and asymptomatic matched controls. Orthopedic Section of the APTA. Amount Funded: \$10,400.00.

Malone T. Sports Specialty Section Hall of Fame- Lifetime Achievement Award. APTA Combined Section Meeting, San Diego, CA, Feb 2006.

Olson A. Awarded a full 3-day registration to the State of the Science Conference on Hearing Enhancement at Gallaudet University, Washington, DC, September 2006.

Olson A, Pugh B, Bishop M. Vocational rehabilitation counselors' knowledge of cochlear implants. University of Kentucky, College of Education. Amount Funded: \$4,251.83.

Uhl TL, Spigelman T. Dry-land freestyle swimming: Comparison of traditional and multi-planar swim bench. USA Swimming Science & Technology Grant. Funded 1-1-06 thru 12-31-06. Amount: \$ 14,462.00.

Research and Publications in Progress

LaForme A, Effgen S. Use of groups in pediatric physical therapy. (Submitted.)

Myers CT, O'Brien, SP, Pierce D, & Thompson M. Using occupation by design to synthesize across multiple models for services to children and families. In S. Dunbar (Ed.), Oc-

cupational therapy models for intervention with children and families. Thorofare, NJ: Slack.

Pierce D, Cunningham A, Marshall A. Creating occupational therapy programming for at-risk youth.

Pierce D, Marshall A, Myers C. Historical analysis of the therapeutic use of the physical environment in occupational therapy.

Pierce D, Munier V, Myers CT. The power of object play for infants and toddlers at risk for developmental delays. In D. Parham and L. Fazio (Eds.), *Play in Occupational Therapy for Children* (2nd ed.). St. Louis: Elsevier.

Pierce D, Myers C, Munier V. Informing occupational therapy early intervention through an occupational science description of the development of infant-toddler interactions with home space.

Farewell HRSA Grant

After 6 years we say goodbye to the grant that has funded the startup of the RSDP program and seen its size increase from 8-30 students.

The grant has ensured the Program's continued success.

Fall Colloquium: August 24th, 2006.

