Newell

University of Illinois

I have served or am currently serving as Director of Research for:

L. G. Carlton, Physical Education, graduated May, 1979. "The role of vision for the control of aiming movement"

M. G. Carlton, Physical Education, graduated May, 1981. "Amending limb movements to mechanical disturbances"

L. E. Falkenberg, Physical Education, graduated January, 1982. "The initiation of visual corrections within the acceleration and deceleration phases of movement"

A. M. Pelligrini, Physical Education, graduated October, 1982. "Development of dual task performance"

P. A. Hancock, Physical Education, graduated May, 1983. "An endogenous metric for the perception of short temporal intervals"

R. H. McFarquhar, Physical Education, graduated February, 1985. "Attention and Motor Skills."

R. N. Robertson, Physical Education, graduated May, 1985. "Human muscular contraction: Role of the mechanical components."

W. A. Sparrow, Physical Education, graduated October, 1985. "Efficiency and motor skill learning"

B. G. Rutter, Kinesiology, graduated October, 1987. "Towards an ecological model of prehension"

D. M. Scully, Kinesiology, graduated October, 1987. "Perception of biological motion"

R. E. A. van Emmerik, Kinesiology, graduated May, 1990. "Stability and instability in the coordination of multijoint limb movements"

S. Kim, Kinesiology, graduated January, 1992. "Speed and accuracy in movement timing"

A. Antoniou, Kinesiology, graduated January, 1992. "Visual perception of moving objects: Effects of velocity and direction"

P. V. McDonald, Kinesiology, graduated May, 1992. "Exploration and the acquisition of skill" S. M. Slobonouv, Kinesiology, graduated May, 1994. "Dynamic strategies of human postural control" I have served as chairperson for:

M. D. Grabiner, Physical Education, graduated October, 1985 P. M. McGinnis, Physical Education, graduated October, 1984 M. Kernodle, Kinesiology, graduated May, 1988 K. Kim, Kinesiology, graduated May, 1992

I have served as chairperson for:

M. D. Grabiner, Physical Education, graduated October, 1985

- P. M. McGinnis, Physical Education, graduated October, 1984
- M. Kernodle, Kinesiology, graduated May, 1988
- K. Kim, Kinesiology, graduated May, 1992

The Pennsylvania State University

I have served or am currently serving as Director of Research for:

Schreyer Honors College:

R. L. Morgan, Kinesiology, graduated May, 2004. "Cognitive constraints and the stability of postural control in older adults"

M. Joseph, Kinesiology, graduated May, 2011. "Task difficulty and the time scales of motor learning."

M. Loncharich, Kinesiology, graduated May, 2011. Augmented visual information and tremor.

M. Mazich, Kinesiology, graduated December, 2012. Visual information about past, current and future properties of irregular target paths in isometric force tracking.

A. Anders, Kinesiology, graduated May, 2014. Stability of standing on an unstable surface.

Doctoral Degree Students:

J. Valvano, Exercise and Sport Science, graduated January, 1996. "Force production in children with cerebral palsy"

M. Rice, Exercise and Sport Science, graduated May, 1996. "Inter-limb coupling and left hemiplegia"

S. Morrison, Kinesiology, graduated December, 1997. "Compensatory strategies and postural tremor"

P. Cesari, Kinesiology, graduated August, 1999. "The scaling of human grip configurations"

C. Johnson, Kinesiology, graduated August, 1999. "Aging and postural control"

M. P. Broderick, Kinesiology, graduated May, 2000. "Coordination changes in learning to bounce a ball"

Y. Ko, Kinesiology, graduated August, 2000. "Organization of compensatory postural coordination"

D. E. Vaillancourt, Kinesiology, graduated May 2001. "Tremor and force output in Parkinson's disease"

G. Daniels, Kinesiology, Kinesiology, graduated May 2002. "Human walking and running: Energetics and information"

M. Ford, Kinesiology, Kinesiology, graduated August 2003. "Arm movement dynamics and walking in individuals with CVA"

K. M. Deutsch, Kinesiology, graduated December 2003. "Sensori-motor noise and the structure of children's isometric force variability"

S.-C. Lai, Kinesiology, Graduated August 2005. "Information theory, entropy, and movement variability"

J. J. Sosnoff, Kinesiology, Graduated August 2005. "Aging, noise and visual motor processing"

P. Haibach, Kinesiology, Graduated December 2005. "Optical flow and postural control in young and elderly adults using virtual reality"

K. Jordan, Kinesiology, Graduated August 2006. "Variability and long range correlations in human walking and running"

S. L. Hong, Kinesiology, Graduated May 2007. "Entropy compensation in human motor adaptation"

E. James, Kinesiology, Graduated August 2009. "Coordination dynamics in redundant and non-redundant coordination tasks"

R. Ranganathan, Kinesiology, Graduated December 2009. "Utilization of redundancy in motor learning"

The University of Georgia, Athens

Doctoral Degree Students

I have served or am currently serving as Director of Research for:

Melissa C. Kilby, Kinesiology, Graduated December 2015. "The degrees of freedom problem in postural control: Collective variables and redundancy."

Charley W. Lafe. Kinesiology

Martijn Verhoeven, Kinesiology

E. J. I-Chieh, Kinesiology

Matheus M. Pacheco, Kinesiology

Thomas Novak, Kinesiology

M. Lee, Kinesiology, Graduated May 2011. "The development of reaching movements in infancy"

X. Hu, Kinesiology, Graduated August 2011. "Constraints, redundancy, and patterns of force coordination"

A. C. King, Kinesiology, Graduated August 2013. "Motor learning and force output dynamics"

Z. Wang, Kinesiology, Graduated August 2013. "Inter- and intra-foot coordination dynamics of quiet standing postures"

J-H. Ko, Kinesiology, Graduated August 2014. "Postural coordination patterns and surface of support dynamics"

Alek Rothenberg-Cunningham, Kinesiology, Graduated December 2014. "Perception-action coupling in interception tasks"

Tsung-Yu	Hsieh,	Kinesiology,	Graduated	July	2015.	"Entropy	of
speed	and	accuracy	trade-off	in	space-time"		

Karl M. Newell, Vitae

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A. Dutt-Mazumder, Kinesiology, Graduated December 2015. "Collective variables in dynamic postural stability"