

# COLLEEN ANN LEWIS

## PERSONAL INFORMATION

Office Address: Division of Kinesiology  
University of Michigan  
401 Washtenaw Ave  
Ann Arbor, MI 48109-2214  
(734) 763-5829

Home Address: 4643 Hunt Club Dr #1C  
Ypsilanti, MI 48197  
(734) 528-2038

Internet Address: caelewis@umich.edu

## ACADEMIC DEGREES

- Ph.D. May, 2002  
**Human Performance**  
Indiana University, Bloomington, IN  
Department of Kinesiology, School of HPER  
**Area of Study:** Adapted Physical Education  
**Concentration:** Motor Control  
**Minor:** Neuroscience  
Advisor: Paul R. Surburg Ph.D.  
Thesis: *Re-establishing Postural Stability as it Compares to Midline Crossing Inhibition Utilizing Individuals with Spastic Diplegic Cerebral Palsy*
- M.S. August, 1993  
**Anatomy**  
Wright State University, Fairborn, OH  
Department of Anatomy, School of Medicine  
**Area of Study:** Human Anatomy  
**Concentration:** Rehabilitation Science  
Advisor: Mary M. Rodgers Ph.D.  
Thesis: *A Passive Joint Motion Technique for the Quantification of Spasticity*
- B.S. May, 1991  
**Biology**  
Denison University, Granville, OH  
**Major:** Biology  
**Minor:** History

## **PROFESSIONAL EXPERIENCE**

### **Postdoctoral Research Fellow** (Spring 2005-present)

Mentors: Susan H. Brown, Ph.D. and Edward Hurvitz, M.D.

Training Grant (Denise Tate, Ph.D.; PI and Edward Hurvitz, M.D.; PI):

National Institutes of Health T32

Department of Physical Medicine & Rehabilitation, University of Michigan, Ann Arbor, MI

- Development, collection and dissemination of research studies related to assessment and rehabilitation of the upper limb for individuals with cerebral palsy
- Assisted developing and writing federal, state and foundation grants
- Supervisor of undergraduate students participating in research activities.
- Invited to the Medical Rehabilitation Research Training Workshop sponsored by the National Institutes of Health.

### **Postdoctoral Research Fellow** (Fall 2003-Spring 2005)

Mentor: Susan H. Brown, Ph.D.

Training Grant (Dale Ulrich, Ph.D.; PI): Department of Education, Office of Special Education and Rehabilitation Services

Division of Kinesiology, University of Michigan, Ann Arbor, MI

- Development, collection and dissemination of research studies related to assessment and rehabilitation of the upper limb individuals with cerebral palsy,
- Assisted developing and writing federal, state and foundation grants
- Supervisor of undergraduate students participating in research activities.

### **Assistant Professor** (Fall 2000-2003)

Chair: Jerry Casciani, Ph.D.

Department of Physical Education, School of Professional Studies, State University of New York-Cortland, Cortland, NY

- Instructor in the graduate and undergraduate programs for Adapted Physical Education and Physical Education core courses
- Supervisor of graduate assistants in Adapted Physical Education
- Supervisor of undergraduate lab assistants in Adapted Physical Education

### **Visiting Lecturer** (Fall 1999-Spring 2000)

Chair: Hal Morris Ph.D.

Department of Kinesiology, School of Health Physical Education and Recreation, Indiana University, Bloomington, IN

- Instructor of Movement Performance of Persons with Disabilities graduate course
- Instructor of Adapted Physical Education undergraduate course
- Supervisor of graduate level Adapted Physical Education teachers at practicum
- Supervisor of undergraduate Adapted Physical Education students at practicum

### **Associate Instructor** (Fall 1993-Summer 1999)

Advisor: Paul Surburg Ph.D.

Grant: Department of Education, Office of Special Education and Rehabilitation Services  
Department of Kinesiology, School of Health Physical Education and Recreation, Indiana  
University, Bloomington, IN

- Instructor of undergraduate Motor Learning Structural Kinesiology labs
- Supervisor of graduate level Adapted Physical Education teachers at practicum
- Supervisor of undergraduate Adapted Physical Education students at practicum
- Adapted Physical Education teacher across the lifespan Monroe County

## **GRANTS AND FELLOWSHIPS**

- 2005 Brown, S., Hurvitz, E., & Lewis, C.  
Upper Limb Sensorimotor Training Utilizing Telerehabilitation in Adults with Hemiplegic Cerebral Palsy developed for NIDRR. **Funded \$498,989.00**
- 2004 Brown, S., Hurvitz, E., & Lewis, C.  
Upper Limb Sensorimotor Training in Adults with Hemiplegic Cerebral Palsy developed for United Cerebral Palsy Foundation. Not Funded
- 2004 Brown, S., Hurvitz, E., Goble, D., & Lewis, C.  
Bilateral Coordination in Congenital Motor Disabilities developed as an R01 for NIH. Not Funded
- 2003 Davis, T. & Lewis, C.  
Faculty Research Program sponsored by SUNY-Cortland. **Funded \$3000.00**
- 2003 Lewis, C.A.  
Cortland College Foundation Travel and Research Grant. **Funded \$290.00**
- 2003 Lewis, C.A.  
Individual Development Awards Program sponsored by United University Professionals. **Funded \$300.00**
- 2000 Lewis, C.A.  
Technology in the Classroom Teaching Award, SUNY-Cortland. **Funded \$750.00**
- 1997 Lewis, C.  
Dr. Marjorie Phillips Graduate Research Award, Indiana University, **\$1000.00**
- 1996 Lewis, C.A. and LeBlanc M.K.  
*Strategies in Re-establishing Postural Stability After Bilateral Electrical Stimulation*. Indiana University School of HPER Graduate Student Research Grant-In Aid. **Funded \$750.00**

## **PUBLICATIONS**

- Goble, D.J., Lewis, C.A., Hurvitz, E.A., & Brown, S.H. (2006). Upper limb asymmetries in the utilization of proprioceptive feedback. *Experimental Brain Research*, 168, 307-311.
- Goble, D.J., Lewis, C.A., Hurvitz, E.A., & Brown, S.H. (2005). Development of upper limb proprioceptive accuracy in children and adolescents. *Human Movement Science*, 24, 155-170.
- Davis, T.D. & Lewis, C.A. (2001). Innovative techniques for understanding children with autism (spectrum disorders)/PDD in physical education. *Proceedings of the Adapted Physical Activity Sessions 2<sup>nd</sup> World Congress and Exposition on Disabilities*.

Woodard, R.J., Surburg, P.R. & **Lewis, C.A.** (1998). Upper and lower extremity midline crossing

effects upon individuals with mild to moderate mental retardation. *Education and Training in Mental Retardation*, 33, 386-394.

Mynark, R.G., Koceja, D.M. & **Lewis, C.A.** (1997). Heteronymous monosynaptic Ia facilitation from supine to standing and its relationship to the soleus H-reflex. *International Journal of Neuroscience*, 92, 171-186.

### **MANUSCRIPT ACCEPTED PENDING REVISIONS**

**Lewis, C.A.** & Surburg, P.R. Assessment of knee rehabilitation utilizing a midline crossing task. *Archives of Physical Medicine and Rehabilitation*.

**Lewis, C.A.** & Surburg, P.R. *Examining midline crossing ability in adults with spastic diplegic cerebral palsy*. Adapted Physical Activity Quarterly

### **MANUSCRIPTS UNDER REVIEW/PREPARATION**

#### *Under Review*

**Lewis, C.A.** & Surburg, P.R. *Postural stability in adults with spastic diplegic cerebral palsy*. *Developmental Medicine and Child Neurology*

#### *In Preparation*

**Lewis, C.A.**, Goble, D.J., Hurvitz, E.A., Brown, S.H. *Bilateral coordination in children with mild spastic hemiparesis*.

Woodard R.J., **Lewis, C.A.**, & Surburg P.R. *The effects of Huntington's Disease on midline crossing ability*.

**Lewis, C.A.** & Surburg, P.R. *Fractionated reaction time in adults with mild mental retardation utilizing a midline crossing task*.

### **PRESENTATIONS**

**Lewis, C.A.**, Goble, D.J., Hurvitz, E.A. & Brown, S.H. (2005, October). *Sensorimotor coordination in children with hemiplegic cerebral palsy*. Poster presented at the annual assembly of the American Academy of Physical Medicine and Rehabilitation, Philadelphia, PA.

**Lewis, C.A.**, Goble, D.J., Hurvitz, E.A. & Brown, S.H. (2005, September). *Proprioceptive acuity and multi-joint coordination in hemiplegic cerebral palsy*. Poster presented at the joint conference of the American Congress of Rehabilitation Medicine and the American Society of Neurorehabilitation, Chicago, IL.

**Lewis, C.A.**, Goble, D.J., Hurvitz, E.A., Brown, S.H. (2004, October). *Proprioceptive acuity in children with mild spastic hemiparesis*. Poster presented at the annual meeting of the Society for Neuroscience, San Diego, CA.

Goble, D.J., Chesney, J.D., **Lewis, C.A.**, Brown, S.H. (2004, October). *Limb asymmetries during passive but not active proprioceptive matching*. Poster presented at the annual meeting of the Society for Neuroscience, San Diego, CA.

**Lewis, C.A.** & Surburg P.R. (2002, November). *The effects of Huntington's Disease (with*

- symptoms and without) on midline crossing reaction time.* Poster presented at the annual meeting of the Society for Neuroscience, Orlando, FL.
- Lewis, C.A. & Surburg, P.R.** (2002, September). *Dynamic postural stability in adults with spastic diplegic cerebral palsy.* Poster presented at the bi-annual meeting of the North American Federation of Adapted Physical Activity, Corvallis, OR.
- Lewis, C.A.** (2001, December). *Assessment instruments for students with disabilities in physical education.* Invited to present workshop for Superintendents Day, Cortland, NY.
- Lewis, C.A. & SUNY-Cortland APE Concentration Students** (2001, November). *Physical fitness for individuals with disabilities.* Presented at the annual New York State Association for Health, Physical Education, Recreation and Dance, Rochester, NY.
- Craft, D. & Lewis, C.** (2001, October). *Assessing students with disabilities in physical education.* Invited to present workshop for Superintendents Day, Central Square, NY.
- Davis, T.D. & Lewis, C.A.** (2001, September). *Innovative techniques for understanding children with autism (spectrum disorders)/PDD in Physical Education.* Presented at the annual World Congress and Exposition on Disabilities, Atlanta, GA.
- Shapiro, D.R. & Lewis, C.A.** (2001, September). *Modifying the task using basic biomechanical principles to facilitate inclusion in Physical Education.* Presented at the annual World Congress and Exposition on Disabilities, Atlanta, GA.
- Lewis, C.A. & Surburg P.R.** (2000, November). *Midline crossing inhibition in adults with spastic diplegic cerebral palsy.* Poster presented at the annual meeting of the Society for Neuroscience, New Orleans, LA.
- Lewis, C.A. & Surburg, P.R.** (2000, October). *Postural stability in adults with spastic diplegic cerebral palsy.* Poster presented at the bi-annual meeting of the North American Federation of Adapted Physical Activity, New Orleans, LA.
- Davis, T.D. & Lewis, C.A.** (2000, October). *Inclusion in Physical Education: Legal and Philosophical Requirements.* Presented at the annual meeting of the Physical Education and Health Directors Conference, Binghamton, NY.
- Lewis, C.A.** (1999, November). *Preschool Movement Seminar.* Coordinator and presenter at the annual meeting of Ball State University and Indiana University Adapted Physical Education students.
- Lewis, C.A., Woodard, R.J., Surburg, P.R. & Apache, R.R.** (1998, October). *Evolution of a neurological assessment technique.* Symposium presenter at the bi-annual meeting of the North American Federation of Adapted Physical Activity, Minneapolis, MN.
- Lewis, C.A. & Surburg, P.R.** (1998, June). *Examining MCI mechanisms in fractionated reaction time tasks.* Poster presented at the annual meeting of the North American Society of Sport and Physical Activity, Chicago, IL.
- Lewis, C.A. & Surburg P.R.** (1997, November). *Midline crossing effect upon individuals post-ACL surgery.* Poster presented at the annual meeting of the Society for Neuroscience, New Orleans, LA.
- Lewis, C.A., Woodard R.J. & Surburg P.R.** (1997, May). *The effects of Huntington's Disease on midline crossing ability.* Poster presented at the annual meeting of the North American Society of the Psychology of Sport and Physical Activity, Denver, CO.
- Lewis, C.A. & Surburg, P.R.** (1997, May). *Examining MCI mechanisms in both simple and complex fractionated reaction time tasks.* Poster presented at the annual meeting of the American College of Sports Medicine, Denver, CO.
- Mynark, R.G., Koceja, D.M. & Lewis, C.A.** (1996, November). *Relationship among presynaptic*

- inhibition, H-reflex modulation, static stability and recovery from postural perturbation.* Poster presented at the annual meeting of the Society for Neuroscience, Washington, D.C.
- Lewis, C.A. & Surburg P.R.** (1996, November). *Examining MCI mechanisms in complex fractionated reaction time tasks.* Poster presented at the annual meeting of the Society for Neuroscience, Washington, D.C.
- Lewis, C.A. & Shapiro D.R.** (1996, October). *Application of assessment tools in an inclusion setting.* Presentation at the annual meeting of the Indiana Alliance for Health, Physical Education, Recreation and Dance, Evansville, IN.
- Woodard, R.J., Lewis, C.A. & Surburg P.R.** (1996, May). *Effects of Huntington's Disease on midline crossing ability.* Poster presented at the annual meeting of the American College of Sports Medicine, Cincinnati, OH.
- Woodard, R.J., Lewis, C.A., Koceja, D.M. & Surburg, P.R.** (1996, March). *The effects of an aerobic dance program on postural control of adults with mild to moderate mental retardation.* Poster presented at the annual meeting of the American Alliance for Health, Physical Education, Recreation and Dance, Atlanta, GA.
- Woodard, R.J., Lewis, C.A. & Surburg, P.R.** (1995, March). *Upper and lower extremity midline crossing effects in adults with mild to moderate mental retardation.* Paper presented at the annual meeting of the American Alliance for Health, Physical Education, Recreation and Dance, Portland, OR.
- Lewis, C.A. & Surburg, P.R.** (1995, February). *Midline crossing effect upon individuals with ACL problems.* Paper presented at the bi-annual MGM conference in conjunction with the University of New Orleans, New Orleans, LA.
- Lewis, C.A. & Woodard, R.J.** (1994, October). *Peers, buddies and pals.* Presentation at the annual meeting of the Indiana Alliance for Health, Physical Education, Recreation and Dance, Merrillville, IN.
- Eason, R.L., Surburg, P.R., Woodard, R.J. & Lewis, C.A.** (1994, October). *Midline crossing inhibition: exploring the explanations.* Symposium presenter at the bi-annual meeting of the North American Federation of Adapted Physical Activity, East Lansing MI.
- Lewis, C.A. & Rodgers, M.M.** (1994, April). *Quantification of spasticity using individuals with spinal cord injury.* Poster presented at the annual meeting of The American Physical Therapy Association, New Orleans LA.

## **GRADUATE THESIS COMMITTEE**

### *Primary Advisor*

Cummiskey, M. (2004) Skill attainment and preferences in co-educational and same sex physical education. SUNY Cortland, Department of Physical Education.

## **PROFESSIONAL EXPERIENCES**

Consultant. Lisa McElney for an *NIH - SBIR Application: After-school gets moving: multimedia obesity interventions for urban, out-of-school-time programs* (2004 re-submittal).

Proposal Review. Michael Gillespie, Ph.D. Royal Hospital for Neuro-disability: *Leisure interests and satisfaction among patients who are ventilator dependent* (2004).

Book Review: Sherrill, C. *Adapted Physical Activity, Recreation and Sport: Cross Disciplinary*

*and Lifespan 5<sup>th</sup> edition (2001).*

Consultant - Cortland School District for Adapted Physical Education Services (2002).

Consultant - Red Creek School District for Adapted Physical Education Services (2001).

### **SERVICE (UNIVERSITY)**

#### All-College – SUNY Cortland

Presidential Appointment Committee on the Status and Education of Women (2002-2003)

Committee on Faculty Affairs, Chair, SUNY-Cortland (2001-2003)

Faculty Senate Steering Committee (2001-2003)

Judicial Affairs Faculty Justice, SUNY-Cortland (2001-2003)

#### School of Professional Studies – SUNY Cortland

Ad Hoc. Committee on Pre-Service Teacher Literacy Issues as charged by the Teacher Education Council (2001-2002)

#### Department of Physical Education – SUNY Cortland

Chair's Council (2003)

Search Committee for Motor Development, tenure track position (2002)

Ad Hoc. Committee on Equitable Treatment of Students (2001-2003)

Graduate Curriculum Committee, SUNY-Cortland (2000-2003)

#### Department of Kinesiology – Indiana University

Committee to Review the Chair, Indiana University (1998)

### **SERVICE (COMMUNITY)**

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|-----------|---|
| 2005      | Developed and supervised a service learning program entitled “Wellness 101. Movement Science undergraduate students in the Division of Kinesiology at the University of Michigan were paired with adults with physical disabilities and engaged in a physical activity program. |
| 2004      | The State of Michigan Ad Hoc Task Force on “How to use Sports, Physical Activity and Recreation in the Rehabilitation of Persons with Disabilities  |
| 2000-2003 | Community (Cortland, NY) based recreational sport program twice weekly<br>Approximately 50 children and adults with disabilities and 30 physical Education pre service students participated in a sport and swim program  |

## TEACHING

*SUNY Cortland*

*Department of Physical Education*

2000-2001

PED 303 (1 cr) Fitness for Individuals with Disabilities  
(F/20 and Sp/20&7)

PED 306 (1 cr) Adapted Aquatics (F/30&9)

PED 356 (3 cr) Adapted Physical Education & Sport (F/48 and Sp/51)

PED 444 (1 cr) Lab Assistant (F/10 and Sp/13)

PED 447 (3 cr) Adapted Physical Education and Individual Differences  
(Sp/17)

PED 630 (3 cr) Assessment in Adapted Physical Education (Sp/9)

PED 632 (3 cr) Instructional Strategies in Adapted Physical Education  
(Su/20)

2001-2002

PED 303 (1 cr) (F/25)

PED 306 (1 cr) (F/16&19)

PED 356 (3 cr) (F/49 and Sp/39)

PED 444 (1 cr) (F/10 and Sp/13)

PED 447 (3 cr) (Sp/15)

PED 530 (4 cr) Introduction to Adapted Physical Education (extensively revised and expanded the graduate curriculum in Adapted Physical Education to reflect the Adapted Physical Education National Standards as well as practical experience working with undergraduate students and students with disabilities) (F/9)

PED 611 (3 cr) Research Methods in Physical Education (Su/13)

PED 636 (4 cr) Curriculum and Assessment in Adapted Physical Education (extensively revised and expanded the graduate curriculum in Adapted Physical Education to reflect the Adapted Physical Education National Standards as well as incorporation of assessment in their teaching curricula as a demonstration of outcome for students with disabilities) (Sp/10)

PED 638 (3 cr) Positive Behavior Management (Su/20)

PED 651 (3 cr) Cumulative Exam in Adapted Physical Education (extensively revised and expanded the graduate curriculum in Adapted Physical Education to reflect the National Standards as well as implement a portfolio to demonstrate mastery of subject matter) (Su/4)

2002-2003

PED 303 (1 cr) (F/13&17 and Sp/15&5)

PED 356 (3 cr) (F/41 and Sp/18)

PED 444 (1 cr) (F/8 and Sp/6)

PED 447 (3 cr) (Sp/14)

PED 470 (3 cr) Foundations and Organization of Modern Education

(F/27)

PED 530 (4 cr) (F/15)

PED 610 (3 cr) Graduate Readings in Physical Education (developed a series of modules in light of current literature and taught by the students based on current issues in physical education which later became the foundation for student portfolios (Sp/19)

PED 611 (3 cr) (Su/30)

PED 638 (3 cr) (Su/20)

PED 650 (3 cr) Master's Thesis (initiated a research based thesis protocol) (Sp/1)

PED 651 (3 cr) (Su/4)

*Indiana University*

*Department of Kinesiology*

1995-1997 Laboratory Instructor – Structural Kinesiology

1998 (fall) Instructor – undergraduate Adapted Physical Education

1999-2000 Visiting Lecturer – graduate and undergraduate Adapted Physical Education courses

*Wright State University*

*Department of Anatomy*

1991-1993 Teaching Assistant – Human Anatomy for Nursing Majors

**PROFESSIONAL MEMBERSHIPS**

1996-present Society for Neuroscience

1995-present American Alliance for Health, Physical Education, Recreation and Dance

1994-present North American Federation of Adapted Physical Education

