

April 13, 2010

CURICULUM VITAE

ANDREW M. GORDON

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EDUCATION

Ph.D. 1992	Karolinska Institute Stockholm, Sweden Nobel Institute for Neurophysiology and Department of Pediatrics Motor Control and Development
M.S. 1989	The Pennsylvania State University University Park, Pennsylvania Department of Kinesiology Motor Control and Learning
B.A. 1985	Hampshire College Amherst, Massachusetts Cognitive Science/Physiology

RESEARCH INTERESTS

The behavioral and neural basis of motor control, the integration of sensory information for the initiation and continuation of movement, the developmental processes underlying the planning of movements, pathophysiological aspects of these processes when development is disrupted, how these mechanisms are affected by various degenerative processes, development of rehabilitation techniques for impaired hand function, and brain imaging during natural movements.

PROFESSIONAL EXPERIENCE

Professor (2004-present)

Department of Biobehavioral Sciences
Teachers College, Columbia University

Associate Professor (1998-2004)

Department of Biobehavioral Sciences
Teachers College, Columbia University

Assistant Professor (1995-1998)

Department of Biobehavioral Sciences
Teachers College, Columbia University

Adjunct (1996-present)

Department of Rehabilitation Medicine
College of Physicians and Surgeons
Columbia University

Postdoctoral Research Associate/National Research Service Fellow (1992-1995)

University of Minnesota Medical School
Department of Physiology, Sponsor—John Soechting

Postdoctoral Research Associate (1992)

Karolinska Institute
Nobel Institute for Neurophysiology and Department of Pediatrics, Sponsor—Hans Forssberg

Research Associate (1991-1992)

Department of Neurology
Children's Hospital, Boston
Harvard University

Research Assistant/Dissertation Fellow/Guest Lecturer (1989-1992)

Karolinska Institute
Nobel Institute for Neurophysiology and Department of Pediatrics
Dissertation advisors—Hans Forssberg, Roland Johansson

Teaching Instructor (1987-1989)

The Pennsylvania State University
Taught Physical Education and Adaptive Physical Education Courses
Department of Exercise & Sport Science, Thesis advisor—Robert Christina

Research Assistant (1985)

Berol Kemi, Stenungsund, Sweden

Research Assistant (1982-1984)
Hampshire College
School of Communications and Cognitive Science, Supervisor—David Rosenbaum

SELECTED HONORS

American-Scandinavian Foundation Fellowship (1985)
Fulbright Award (1989-1991)
Dissertation Fellowship, Karolinska Institute, (1991-1992)
NIH National Research Service Award (1993-1995)
APTA Hughs Award for best pediatric research paper with a physical therapist/student co-author (2002)
Peer-reviewed paper selected for inclusion in “A Compendium of Leading Research” in Occupational Therapy (2004)
Best Paper Award, Foundation for Physical Medicine & Rehabilitation (2006)
Gayle Arnold Award for best scientific paper (2007)
NIH MRS study section member, October 2009

PROFESSIONAL AFFILIATIONS

Society for Neuroscience
International Brain Research Organization
Society for the Neural Control of Movement
American Academy for Cerebral Palsy and Developmental Medicine

GRANTS AND FELLOWSHIPS

National Science Foundation (2008-2011)
Principle Investigator, “Dexterous Control of Multi-Digit Grasping”
\$191,850

National Institutes of Health (2009-2013)
Sponsor (K01 Trainee: Kathleen Friel)
\$853,389

National Institutes of Health (2008-2009)
Sponsor (K12 Trainee: Kathleen Friel)
\$100,000

Teachers College, Columbia University Faculty Research Fellowship (2009-2010)
Principal Investigator. “Behavioral and Neural Correlates of Intensive Upper Extremity Training in Children with Cerebral Palsy”
\$5,000 (plus semester teaching release)

CVS Caremark (2008)
Principle Investigator, “Scholarship fund for Center for Cerebral Palsy

\$2,000

University of Belgrad (2008)

Sponsor (Trainee: Aleksandar Nedeljkovic)

\$7,500

Thrasher Research Fund (2007-2011)

Principle Investigator, "A Randomized Control Trial of Hand-Arm Intensive Bimanual Therapy"

\$299,401

National Science Foundation (2006-2011)

Principle Investigator, "Coordination of multi-digit forces during grasping"

\$166,500

France Parkinson Foundation

Sponsor (Trainee: Fredric Albert)

30,000 Euro (\$42,000)

Parkinson's Disease Foundation (2007-2008)

Principle investigator, "Multi-digit grasping in Parkinson's disease"

\$1,800

National Institutes of Health, K23 (2006-2011)

Sponsor (K-award Trainee: Preeti Raghaven) "Interhemispheric transfer of grasp control after stroke"

\$646,845

United Cerebral Palsy Research and Education Foundation (2005-2008)

Principal Investigator. "Rehabilitative strategies for improving unimanual and bimanual hand function in children with hemiplegic CP"

\$100,000

Huntington's Disease Society of America (2004-2006)

Co-Investigator. "Is motor variability a reliable biomarker in presymptomatic Huntington's disease?"

\$50,000

Arsinoi Ioannidou (2004)

Sponsor (Predoctoral Trainee: Electra Petra)

\$5,000

National Science Foundation (2003-2006)

Principal Investigator. "Acquisition of neurophysiological instrumentation for language and movement processes"

\$249,734

Swiss National Science Foundation (2004-2005)

Sponsor (Predoctoral Trainee: Priska Gysin) “Coordination of grasping forces during walking”
\$33,000

Gerondelis Foundation, Inc. (2003)
Sponsor (Predoctoral Trainee: Electra Petra)
\$3,500

Teachers College, Columbia University Faculty Research Fellowship (2003-2004)
Principal Investigator. “Application of a novel fine motor skill therapeutic intervention for children with cerebral palsy to school-based therapeutic service”
\$5,000 (plus semester teaching release)

National Institutes of Health, F32 (2002-2005)
Sponsor (Postdoctoral Trainee: Ely Rabin) “Contribution of tactile information to arm movements”
\$124,620

National Institutes of Health, K24 (2002-2005)
Sponsor (Postdoctoral Trainee: Preeti Raghaven) “Rehabilitation Medicine Scientist Training Program Award”
\$114,613

National Institutes of Health (2001-2004)
Principal Investigator. “Constraint-induced therapy in children with hemiplegic cerebral palsy”
\$620,564

National Institutes of Health, F31 (2001-2004)
Sponsor, (Predoctoral Trainee: Laurel Abbruzzese) “Postural Control”
\$73,988

NY Physical Therapy Foundation Grant (2001-2002)
Sponsor (Predoctoral Trainee: Lisa Muratori) “Postural control and grasping in Parkinson’s disease”
\$5,000

Canadian Medical Research Counsel (1999-2003)
Sponsor (Postdoctoral Trainee: Iran Salimi)
\$70,000

National Science Foundation CAREER Award (1998-2004)
Principal Investigator. “Sensorimotor control of hand movement”
\$361,227

German Research Foundation (1998-2000)
Sponsor (Postdoctoral Trainee: Ralf Reilmann)
\$60,000

National Institutes of Health, R03 (1997-2000)

Principal Investigator. "Hand motor control in Huntington's disease"
\$149,510

United Cerebral Palsy Research and Education Foundation (1996-1998)

Principal Investigator. "Sensorimotor control of the hand in children with cerebral palsy"
\$100,000

Teachers College, Columbia University Teaching Technology & Innovation grant (1997-1998)

Co-Principal Investigator. "Enhancing formal and informal instructional settings: Virtual instrumentation and interactive resources"

\$6,000

Teachers College, Columbia University Untenured Faculty Research Grant (1996)

Principal Investigator. "Sensorimotor control of hand motor control in children with CP"
\$6,340

National Institutes of Health, Individual National Research Service Award (1993-1995)

Principal Investigator. "Sensorimotor interactions during rapid finger movements"
\$52,300

Karolinska Institute Dissertation Fellowship (1991-1992)

Fellowship awarded annually to one doctoral candidate in support of dissertation research
125,000 Swedish Kronor (ca. \$22,750)

Karolinska Institute Research Grant (1991-1992)

Principal Investigator. "Hand Motor Control"
7,000 Swedish Kronor (ca. \$1,275)

Norrbacka-Eugenia Foundation Grant (1991-1992)

Co-Investigator. "CNS disturbances underlying poor hand control in cerebral palsy"
25,000 Swedish Kronor (ca. \$4,550)

Swedish Parkinson Disease Foundation Grant (1991)

Co-Investigator. "Coordination of manipulative forces in Parkinson's Disease"
45,000 Swedish Kronor (ca. \$8,175)

Karolinska Institute Travel Grant (1991)

Principal Investigator
4,000 Swedish Kronor (ca. \$725)

European Science Foundation Travel Fellowship (1991)

Principal Investigator. European Training Programme in Brain and Behaviour Winter School on Motor Development

10,000 French Francs (ca. \$1,650)

Karolinska Institute Research Grant (1990-1991)

Principal Investigator
5,000 Swedish Kronor (ca. \$900)

Norrbacka-Eugenia Foundation Grant (1990-1991)
Co-Investigator. "CNS Disturbances underlying poor hand control in cerebral palsy"
25,000 Swedish Kronor (ca. \$4,550)

Wenner-Gren Center Foundation for Scientific Research Fellowship (1990-1991)
Principal Investigator
75,000 Swedish Kronor (ca. \$13,650)

Swedish Sports Research Counsel Grant (1990-1991)
Co-Investigator. "Internal representations underlying object manipulation"
40,000 Swedish Kronor (ca. \$7,275)

Fulbright Award Extension (1990-1991)
13,000 Swedish Kronor (ca. \$2,350)

Fulbright Award (1989-1990)
73,000 Swedish Kronor (ca. \$13,275)

PEER-REVIEWED PUBLICATIONS (86 total)

Zhang, W, Gordon, AM, Fu, Q, Santello, M, Object rotation reveals independent sensorimotor memory representations of digit positions and forces for skilled manipulation. *Journal of Neurophysiology* (Accepted).

Raghaven, P, Santello, M, Gordon, AM, Krakauer, J, Compensatory motor control After Stroke: an alternative joint strategy for object-dependent shaping of hand posture. *Journal of Neurophysiology* (Accepted).

Diermayr, G, Gordon, AM, Grasp control underlying manual dexterity in the elderly. *Gerontology* (In Press).

Albert, F, Diermayr, GD, McIsaac, TL, Gordon, AM (2010) Coordination of grasping and walking in Parkinson's disease. *Experimental Brain Research* 202: 709-721.

Nilsen, DM, Gillen, G, Gordon, AM. The use of mental practice to improve upper limb recovery post-stroke: A systematic review. *American Journal of Occupational Therapy*. (In Press).

Rabin, E, Muratori, LM, Svokos, K, Gordon, A (2010) Tactile/proprioceptive integration during arm localization is intact in individuals with Parkinson's disease. *Neuroscience Letters* 470: 38-42.

Hung, YC, Charles, J, Gordon, AM (2010) Influence of Accuracy Constraints on Bimanual Coordination during a Goal-Directed Task in Children with Hemiplegic Cerebral Palsy.

Experimental Brain Research 201:421-428.

Albert, F, Santello, M, Gordon, AM, (2009) Sensorimotor Memory of Object Weight Distribution during Multidigit. *Neuroscience Letters* 463: 188–193.

Steenbergen, B, Crajé, C, Nilsen, DM, Gordon, AM (2009) Motor imagery training in hemiplegic cerebral palsy: A potentially useful therapeutic tool for rehabilitation *Developmental Medicine and Child Neurology* 51: 690–696.

Montes, J, Gordon, AM, Pandya, S, De Vivo, DC, Kaufmann P (2009) Clinical Outcome Measures in Spinal Muscular Atrophy (SMA). *Journal of Child Neurology* 24: 968-978.

McIsaac, TL, Johnston, JA, Santello, M, Zhang, W, Gordon, AM (2009) Task-specific modulation of multi-digit forces to object texture. *Experimental Brain Research* 194: 79-90.

Gordon, AM, Chinnan, A, Gill, S, Petra, E, Hung, YC, Charles, J (2008) Both constraint-induced movement therapy and bimanual training lead to improved performance of upper extremity function in children with hemiplegia. *Developmental Medicine and Child Neurology* 50: 957-958.

Diermayr, G, Gysin, P, Hass, CJ, Gordon AM (2008) Grip force control during gait initiation with a hand-held object. *Experimental Brain Research* 190: 337-345.

Gysin, P, Kaminski, TR, Hass, CJ, Gordon AM (2008) Effects of gait variations on grip force coordination during object transport. *Journal of Neurophysiology* 100: 2477-2485.

Steenbergen, B, Charles, J, Gordon, AM (2008) Fingertip force control during bimanual object lifting in hemiplegic cerebral palsy. *Experimental Brain Research* 186: 191-201.

Majsak, M, Kaminski, T, Gentile, AM, Gordon, AM (2008) Effects of a moving target versus a temporal constraint on reach and grasp in patients with Parkinson's disease *Experimental Neurology* 210: 479-88.

Muratori, L, McIsaac, T, Gordon, AM, Santello, M (2008), Impaired Anticipatory Control of Force Sharing Patterns during Whole-Hand grasping in Parkinson Disease *Experimental Brain Research* 185: 41-52.

¹Gordon, AM, Charles, J, Schneider, JA, Chinnan, A, (2007) Efficacy of a Hand-Arm bimanual intensive therapy (HABIT) for Children with Hemiplegic Cerebral Palsy: A Randomized Control Trial. *Developmental Medicine and Child Neurology* 49: 830-838.

Charles, JC, Gordon, AM (2007) A repeated course of constraint-induced movement therapy results in further improvement.. *Developmental Medicine and Child Neurology* 49:770-773.

¹ 2007 Gayle G. Arnold Award for the Best Scientific Paper

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- Steenbergen, B, Verrel, J, Gordon, AM. (2007) Motor planning in congenital hemiplegia *Disability Research* 29: 13-23.
- Gordon, AM, Charles, J Steenbergen, B (2006) Movement planning is disrupted by impaired sensorimotor integration in children with hemiplegic cerebral palsy. *Pediatric Research* 60: 587-91.
- Steenbergen, B, Gordon, AM (2006) Activity limitation in Cerebral Palsy: Evidence for disorders in motor planning *Developmental Medicine and Child Neurology* 48: 780-783.
- Charles, J, Gordon, AM (2006) Development of Hand-Arm Bimanual Intensive Therapy (HABIT) for Improving Bimanual Coordination in Children with Hemiplegic Cerebral Palsy. *Developmental Medicine and Child Neurology* 48:931-936.
- Eliasson, AC, Forssberg, H, Hung, YC, Gordon, AM (2006) Development of Hand Function and Precision Grip Control in Individuals with Cerebral Palsy: A 13-Year Follow Up Study. *Pediatrics* 118:e1226-236.
- Muratori, L, Depaul, G, Gordon, AM (2006) Effect of Object Transport on Grasp Coordination in Multiple System Atrophy. *Movement Disorders* 21:555-63.
- Charles, J, Wolf, SL, Schneider, JA, Gordon, AM (2006) Efficacy of a Child-Friendly Form of Constraint-Induced Movement Therapy in Hemiplegic Cerebral Palsy: A Randomized Control Trial. *Developmental Medicine and Child Neurology* 48:635-642.
- Gordon, AM, Charles, J, Wolf, SL (2006) Efficacy of Constraint-Induced Movement Therapy on Involved-Upper Extremity Use in Children with Hemiplegic Cerebral Palsy is not Age-Dependent. *Pediatrics* 117:e363-373.
- Rabin, E, Gordon, AM (2006) Tactile and muscle spindle cues are interpreted based on joint-specific feedback from prior experience and current movement goals” *Experimental Brain Research* 169:407-16.
- ²Raghaven, P, Krakauer, JW, Gordon, AM (2006) Impaired anticipatory control of fingertip forces in patients with a pure motor or sensorimotor lacunar syndrome. *Brain* 129:1415-1425.
- Raghavan, P, Petra, E, Krakauer, J, Gordon, AM (2006) Patterns of impairment in digit independence after subcortical stroke. *Journal of Neurophysiology* 95:369-78.
- Charles, J, Gordon, AM, (2005) A critical review of constraint-induced movement therapy and forced-use in children with hemiplegia. *Neural Plasticity* 12: 245-261.
- Lamberg, E, Mateika, JM, Gordon, AM (2005) Visual properties of objects affect manipulative forces and respiration differently. *Brain Research* 1066:158-63.

² Best Paper Award, Foundation for Physical Medicine & Rehabilitation (2006)

- Grigos, MI, Saxman, J, Gordon, AM (2005) Speech motor development during acquisition of the voicing contrast. *Journal of Speech, Language, and Hearing Research* 48:739-52.
- Gordon, AM, Charles, J, Wolf, SL (2005) Methods of Constraint-induced Movement Therapy for Children with Hemiplegic Cerebral Palsy: Development of a Child-friendly Intervention for Improving Upper Extremity Function. *Archives of Physical Medicine and Rehabilitation* 86:837-44.
- Hung, Y-C, Charles, J, Gordon, AM (2004) Bimanual coordination of arm movements in children with Hemiplegia. *Developmental Medicine and Child Neurology* 46: 746-753.
- Santello, M, Muratori, L, Gordon, AM (2004) Control of multi-digit grasping in Parkinson's Disease: Effect of object property predictability *Experimental Neurology* 187: 517-528.
- Rabin, E, Gordon, AM (2004) Influence of fingertip contact on illusory arm movements. *Journal of Applied Physiology* 96: 1555-1560.
- Rabin, E, Gordon, AM (2004) Tactile feedback contributes to consistency of movement during typing *Experimental Brain Research* 155: 362-369.
- Duff, SV, Gordon, AM (2003) Learning of grasp control in children with hemiplegic cerebral palsy. *Developmental Medicine and Child Neurology* 45, 746-757.
- Lamberg, E, Mateika, JH, Cherry, L, Gordon, AM (2003) Internal representations underlying respiration and object manipulation. *Brain Research* 982: 270-279.
- Muratori, L, Reilmann, R, Gordon, AM (2003) Coordination of precision grasping in Multiple System Atrophy. *Neuropsychologia* 41: 1498-1508.
- Gordon, AM, Lewis, S, Eliasson, AC, Duff, S (2003) Object release under varying task constraints in children with hemiplegic cerebral palsy. *Developmental Medicine and Child Neurology* 45: 240-8.
- Salimi, I, Frazier, W, Reilmann, R, Gordon, AM (2003) Selective Use of visual information signaling objects' center of mass for anticipatory control of manipulative fingertip forces. *Experimental Brain Research* 150: 9-18.
- Gysin, P, Kaminski, TR, Gordon, AM (2003) Coordination of fingertip forces in object transport during locomotion. *Experimental Brain Research* 149: 371-379.
- ³Nilsen, DM, Kaminski, TR, Gordon, AM (2002) The effect of body orientation on a point-to-point movement in healthy elderly individuals. *American Journal of Occupational Therapy* 57,

³ Selected to be reprinted in: M. Corcoran, C. Brasic Royeen (Eds.) (2003) *Geriatric Issues in Occupational Therapy: A Compendium of Leading Research*. Bethesda: AOTA Press, pp. 53-65.

99-107.

Lewis, S, Duff, S, Gordon, AM (2002) Manual asymmetry during object release under varying task constraints. *American Journal of Occupational Therapy* 56, 391-401.

Bronner, S, Kaminski, TR, Gordon, AM (2002) Effect of Anterior Cruciate Ligament Reconstruction on the Passé Movement in Elite Dancers. *Journal of Dance, Medicine, and Science* 6, 110-118.

Reilmann, R, Gordon, AM, Henningsen (2001) Initiation and development of fingertip forces during whole-hand grasping. *Experimental Brain Research* 140: 443-452.

Reilmann, R, Kirsten, F, Quinn, L, Henningsen, H, Marder, K, Gordon, AM (2001) Objective assessment of progression in Huntington's disease: A 3-year follow-up study. *Neurology* 57, 920-924.

Rao, AK, Gordon, AM (2001) Contribution of tactile information to accuracy of pointing movements. *Experimental Brain Research* 138, 438-445.

Quinn, L, Reilmann, R, Marder, K, Gordon, AM (2001) Altered movement trajectories and force coordination during object transport in Huntington's Disease. *Movement Disorders* 16, 469-480.

Charles, J, Lavinder, G, Gordon, AM (2001) The effects of constraint induced therapy on hand function in children with hemiplegic cerebral palsy. *Pediatric Physical Therapy* 13, 68-76.

Parasher, R, Roy, S, Gordon, AM (2001) Effector-dependent acquisition of novel typing sequences. *Experimental Brain Research* 136, 386-393.

Salimi, I, Hollender, I, Frazier, W, Gordon, AM (2000) Specificity of internal representations underlying grasping. *Journal of Neurophysiology* 84, 2390-2397.

Mateika, JH, Gordon, AM (2000) Coordination of breathing and object manipulation. *Brain Research* 864, 327-337.

Gordon, AM, Quinn, L, Reilmann, R, Marder, K (2000) Coordination of prehensile forces during precision grip in Huntington's disease. *Experimental Neurology* 163, 136-148.

Eliasson, AC, Gordon, AM (2000) Impaired force coordination during object release in children with hemiplegic cerebral palsy. *Developmental Medicine and Child Neurology* 42, 228-234.

Forsberg, H, Ingvarsson, PE, Iwasaki, N, Johansson, RS, Gordon, AM (2000) Action tremor during object manipulation in Parkinson's disease. *Movement Disorders* 5, 244-254.

Gordon, AM, Duff, SV (1999) Relation between clinical measures and fine manipulative control in children with hemiplegic cerebral palsy. *Developmental Medicine and Child Neurology* 41, 586-591.

- Gordon, AM, Charles, J, Duff, SV (1999) Fingertip forces during object manipulation in children with hemiplegic cerebral palsy. II: Bilateral coordination. *Developmental Medicine and Child Neurology* 41, 176-185.
- Gordon, AM, Duff, SV (1999) Fingertip forces during object manipulation in children with hemiplegic cerebral palsy. I: Anticipatory scaling. *Developmental Medicine and Child Neurology* 41, 166-175.
- Gordon, AM (1998) Task-dependent deficits during object release in Parkinson's disease. *Experimental Neurology* 153, 287-298.
- Gordon, AM, Lee, J-H, Flament, D, Ugurbil, K, Ebner, TJ (1998) Functional magnetic resonance imaging of motor, sensory and posterior parietal cortical areas during performance of sequential typing movements. *Experimental Brain Research* 121, 153-166.
- Gordon, AM (1997) Object release in patients with Parkinson's disease. *Neuroscience Letters* 232, 1-4.
- Gordon, AM, Ingvarsson, PE, Forssberg, H (1997) Anticipatory control of manipulative forces in Parkinson's disease. *Experimental Neurology* 145, 477-488.
- Inhoff, AW, Gordon, AM (1997) Oculomotor activity and eye-hand coordination during typing. *Current Directions in Psychological Science* 6, 153-157.
- Ingvarsson, PE, Gordon, AM, Forssberg, H (1997) Coordination of manipulative forces in Parkinson's disease. *Experimental Neurology* 145, 489-501.
- Gordon, AM, Soechting, JF (1995) Use of tactile afferent information in sequential finger movements. *Experimental Brain Research* 107, 281-292.
- Henningsen, H, Ende-Henningsen, B, Gordon, AM (1995) Asymmetric control of bilateral isometric finger forces. *Experimental Brain Research* 105, 304-311.
- Henningsen, H, Ende-Henningsen, B, Gordon, AM (1995) Contribution of tactile afferent information to the control of isometric finger forces. *Experimental Brain Research* 105, 312-317.
- Eliasson, AC, Gordon, AM, Forssberg, H (1995) Tactile control of isometric fingertip forces during grasping in children with cerebral palsy. *Developmental Medicine & Child Neurology* 37, 72-84.
- Gordon, AM, Forssberg, H, Iwasaki, N (1994) Formation and lateralization of internal representations underlying motor commands during precision grip. *Neuropsychologia* 32, 555-568.

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- Gordon, AM, Casabona, A, Soechting, JF (1994) The learning of novel finger movement sequences. *Journal of Neurophysiology* 72, 1596-1610.
- Gordon, AM, Westling, G, Cole, KG, Johansson, RS (1993) Memory representations underlying motor commands used during manipulation of common and novel objects. *Journal of Neurophysiology* 69, 1789-1796.
- Gordon, AM, Forssberg, H, Johansson, RS, Eliasson, AC, Westling, G (1992) Development of human precision grip III: Integration of visual size cues during the programming of isometric forces. *Experimental Brain Research* 90, 399-403.
- Forssberg, H, Kinoshita, H, Eliasson, AC, Johansson, RS, Westling, G, Gordon, AM (1992) Development of human precision grip II: Anticipatory control of isometric forces targeted for object's weight. *Experimental Brain Research* 90, 393-398.
- Eliasson, AC, Gordon, AM, Forssberg, H (1992) Impaired anticipatory control of isometric forces during grasping by children with cerebral palsy. *Developmental Medicine & Child Neurology* 34, 216-225.
- Gordon, AM, Forssberg, H, Johansson, RS, Westling, G (1991) Visual size cues in the programming and control of manipulative forces during precision grip. *Experimental Brain Research* 83: 477-482.
- Gordon, AM, Forssberg, H, Johansson, RS, Westling, G (1991) Integration of sensory information during the programming of precision grip: Comments on the contributions of visual size cues. *Experimental Brain Research* 85: 226-229.
- Gordon, AM, Forssberg, H, Johansson, RS, Westling, G (1991) The integration of haptically acquired size information in the programming of the precision grip. *Experimental Brain Research* 83: 483-488.
- Gordon, AM, Christina, RW (1991) Programming time as a function of movement constraint. *Research Quarterly for Exercise & Sport* 62 (3), 1-6.
- Eliasson, AC, Gordon, AM, Forssberg, H (1991) Basic coordination of manipulative forces of children with cerebral palsy. *Developmental Medicine & Child Neurology* 33, 659-668.
- Rosenbaum, DA, Gordon, AM, Stillings, NA, Feinstein, MH (1987) Stimulus-response compatibility in the programming of speech. *Memory & Cognition* 15 (3), 217-224.
- Gordon, AM, Rosenbaum, DA (1984) Conscious and subconscious arm movements: Application of signal detection theory to motor control. *Bulletin of the Psychonomics Society* 22 (3), 214-216.
- Inhoff, AW, Rosenbaum, DA, Gordon, AM, Campbell, JA (1984) Stimulus-response compatibility and motor programming of manual response sequences. *Journal of Experimental Psychology: Human Perception & Performance* 10, 724-733.

Rosenbaum, DA, Inhoff, AW, Gordon, AM (1984) Choosing between movement sequences: A hierarchical editor model. *Journal of Experimental Psychology: General* 113, 372-393.

BOOK CHAPTERS AND COMMENTARIES (18 total)

Gordon, AM, Magill, RA (In Press) Motor learning: Application of principles to pediatric rehabilitation In S. Campbell, V. Linden, R Palisano, *Physical Therapy for Children*. Elsevier

Gordon, AM Invited Commentary: Two hands are better than one: Bimanual skill development in children with hemiplegic cerebral palsy. *Developmental Medicine & Child Neurology* (In Press)

Gordon, AM, Friel, K (2009) Intensive training of upper extremity function in children with cerebral palsy. In: J. Hermsdoerfer and DA Nowak (Eds) *Sensorimotor Control of Grasping: Physiology and Pathophysiology*. Cambridge University Press.

Gysin, P, Kaminski, T, Gordon, AM (2009) Dynamic Grasp Control during Gait. In: J. Hermsdoerfer and DA Nowak (Eds) *Sensorimotor Control of Grasping: Physiology and Pathophysiology*. Cambridge University Press.

Schertz, M, Gordon, AM. (2009) Changing the Model: A Call for Re-examination of Intervention Approaches & Translational Research in Children with Developmental Disabilities. *Developmental Medicine & Child Neurology* 51: 6-7.

Gordon, AM, Steenbergen, B. (2008) Bimanual coordination in children with cerebral palsy: In: AC Eliasson and P. Burtner (Eds.) *Improving Hand Function in Children with Cerebral Palsy: Theory, evidence and intervention*. Clinics in Developmental Medicine, London: MacKeith Press pp. 160-175.

Eliasson, AC, Gordon, AM. (2008) Constraint-Induced Movement Therapy for Children with Hemiplegia. In: AC Eliasson and P. Burtner (Eds.) *Improving Hand Function in Children with Cerebral Palsy: Theory, evidence and intervention*. Clinics in Developmental Medicine, London: MacKeith Press, pp. 308-319.

Gordon, AM (2007) Invited Commentary, Measuring ‘activity limitation’ in individuals with unilateral upper extremity impairment” *Developmental Medicine and Child Neurology* 49:245.

Gordon, AM (2005) Invited Book Review: *The Brain’s Sense of Movement*, by Alain Berthoz. *Developmental Medicine and Child Neurology* 47:619.

- Nilsen, DM, Kaminski, TR, Gordon, AM (2003) The effect of body orientation on a point-to-point movement in healthy elderly persons. In: M. Corcoran, C. Brasic Royeen (Eds.) (2003) *Geriatric Issues in Occupational Therapy: A Compendium of Leading Research*. Bethesda: AOTA Press, pp. 53-65. (Reprinted from *American Journal of Occupational Therapy* 57, 99-107).
- Gordon, AM, (2001) Development of hand motor control. In: AF Kalverboer and A Gramsbergen (Eds.) *Handbook of Brain and Behaviour in Human Development*. Dordrecht: Kluwer Academic Publishers, pp 513-537.
- Mateika, JM, Gordon, AM (2001) Invited Book Review: Physical Activities for improving children's learning and behavior, by Billye Ann Cheatum and Allison A. Hammond. *Teachers College Record* 103, 29-32.
- Gordon, AM, Reilmann, RR (1999) Getting a grasp on research: does treatment taint testing of Parkinsonian patients? *Brain* 122, 1597-1598.
- Gordon, AM, Forssberg, H (1997) The development of neural control mechanisms underlying grasping in children. In: KJ Connolly and H Forssberg (Eds.) *Neurophysiology and Neuropsychology of motor development*. London, Mac Keith Press, pp 214-231.
- Soechting, JF, Gordon, AM, Engel, JC (1996) Sequential hand and finger movements: typing and piano playing. In: J Bloedel, TJ Ebner and S Wise (Eds.) *Acquisition of Motor Behavior in Vertebrates* Cambridge, MIT Press, pp 343-359.
- Gordon, AM (1994) Development of the reach to grasp movement. In: K.M.B. Bennett and U. Castiello (Eds.), *Insights into the reach to grasp movement. Advances in Psychology*, vol. 105, Amsterdam, Elsevier, pp 37-56.
- Gordon, AM Inhoff, AW (1992) Intermittent use of feedback during movement phase transitions and during the updating of internal models. *The Behavioral and Brain Sciences* 15, 748-749.
- Gordon, AM (1992) Development of anticipatory control mechanisms for manipulation. In: H. Forssberg and H. Hirschfeld (Eds.) *Movement Disorders in Children. Medicine and Sport Science*, vol. 36, Basel, Karger, pp 130-136.

WORK IN PROGRESS

- Gordon, AM, Augmenting pediatric constraint-induced movement therapy and bimanual training with video gaming. *Technology and Disability* (Submitted).
- Parasher, RK, Gentile, AM, Gordon, AM, Word versus Picture Instructions in Organizing Spatially-Directed Arm Movement. (Under Revision).

Diermayr, G, Gordon, AM, Coordination of grasping and walking in during normal and altered gait the elderly (In Preparation).

Islam, M, Gordon, AM, Forssberg, H, Sköld, A, Eliasson, AC, Grip force coordination during a bimanual task in hemiplegic cerebral palsy. (In Preparation).

Prabhu, S, Diermayr, G, Gysin, P, Gordon, AM Impaired anticipatory control of grasp during gait in children with hemiplegic cerebral palsy. (In Preparation).

Petra, E, Gordon, AM, Digit individuation in children with hemiplegic cerebral palsy (In Preparation).

Friel, K, Gordon, AM, corticospinal tract dysgenesis in congenital hemiplegia correlates with dexterity impairments but not potential to improve. (In Preparation).

Hung, YC, Gordon, AM, Bimanual training improves more following bimanual training than unimanual training in children with hemiplegic cerebral palsy. (In Preparation).

Gordon, AM, Hung, YC, Friel, K, Brandao, M, Petra, E, Chinnan, A, et al. Specificity of intensive upper extremity training in children with congenital hemiplegia. (In Preparation).

Charles, J, Wolf, SL, Gordon, AM, Modified constraint induced therapy modified in intensity may not benefit older children with hemiplegic cerebral palsy. (In Preparation).

Gordon, AM, Gordon, P, Porath, N, Inhoff, AW, Eye movement during reading and typing. (In Preparation).

Gordon, AM, Hening, W, Adamovitch, S, Poizner, H, Temporal control of typing in a patient with Parkinson's disease. (In Preparation).

Roy, S, Gordon, AM A kinematic study of typing acquisition. (In Progress).

INVITED PRESENTATIONS

Gordon, AM Bimanual movement therapy in children with hemiplegia. Keynote speaker at the 8th International Congress on Cerebral Palsy, Ljubljana, Slovenia, October 14, 2010.

Gordon, AM Movement therapy in children with unilateral spastic cerebral palsy: to constrain or not to constrain, that is the question. To be presented at the Impact of Intervention - can we affect typical and atypical development of the human brain? International Symposium, Groningen, The Netherlands, April 24, 2010.

Gordon, AM Bimanual training in children with cerebral palsy. Presented at Sint Maartenskliniek, Nijmegen, The Netherlands, March 25, 2010.

Gordon, AM Workshop: HABIT training in children with cerebral palsy. Presented at Sint Maartenskliniek, Nijmegen, The Netherlands, March 25, 2010

Gordon, AM Five years of hand training. Now what? Presented at Paretic hand in childhood: New approaches. Calambrone, Italy, October 3, 2009

Gordon, AM Unimanual and bimanual training in children with cerebral palsy. To be presented at Université Catholique de Louvain Responsable de l' Unité de Réadaptation et de Médecine Physique Tour Pasteur, Brussels, Belgium, September 2009.

Gordon, AM, Charles, J Methodology of Hand-Arm Bimanual Intensive Therapy. Presented at University Hospital, Freiburg, Germany, June 18, 2009.

Gordon, AM, Charles, J Bimanual training and constraint-therapy in children with CP. Presented at University Hospital, Freiburg, Germany, June 19, 2009.

Gordon, AM Bimanual training in CP. Presented at Blythedale Children's Hospital, Valhalla, NY, May 28, 2009.

Gordon, AM Rehabilitation of upper extremity function in children with hemiplegia. Presented at the Department of Bioengineering, University of Southern California, Los Angeles, CA, April 30, 2009.

Gordon, AM What do two hands know that one does not? Bimanual training in children with cerebral palsy. Presented at the Kathlic University Leuven, Leuven, Belgium, January 16, 2009.

Gordon, AM Bimanual coordination in children with cerebral palsy. Presented at the Neuropediatrics Research Center, Astrid Lindgrens Children's Hospital, Karolinska University, Stockholm, Sweden, January 12, 2009.

Gordon, AM Bimanual (HABIT) training in children with congenital hemiplegia. Presented at the American Academy of Cerebral Palsy and Developmental Medicine Grand Grounds, Online lecture, November 11, 2008.

Gordon, AM Intensive rehabilitation of upper extremity function in children with hemiplegia. Presented at the Division of Kinesiology, University of Wisconsin, Madison, WI, November 7, 2008.

Gordon, AM, Charles, J. Upper extremity rehabilitation in cerebral palsy. Presented at the Annual Conference on Cerebral Palsy, Laval University, Quebec City, Canada, October 30, 2008.

Gordon, AM "How the brain controls grasping" Presented at the John Soechting 65th Birthday Tribute, Vienna, Austria, October 6, 2008.

Gordon, AM Intensive rehabilitation of upper extremity function in children with hemiplegia. Presented at the State of the Science conference on Pediatric Rehabilitation, Rehabilitation Engineering Research Center on Technology for Children with Orthopedic Disabilities, New Jersey Institute of Technology, Newark, NJ October 17, 2008.

Gordon, AM, Improving hand function in children with congenital hemiplegia. Presented at Grand Rounds, Emory University, May 20, 2008.

Gordon, AM, Charles, J, Upper extremity rehabilitation in children with hemiplegia. Presented at the Institut de readaptation en deficiance physique de Quebec, Quebec City, Canada, May 12, 2008.

Gordon, AM, Charles, J, Intensive upper extremity practice in children with hemiplegia. Presented at the Center for Interdisciplinary Research in Rehabilitation and Social Integration, Laval University, Quebec City, Canada, May 12, 2008.

Charles, JC, Gordon, AM Intensive practice and hemiplegic CP: CIT & HABIT b) CI Therapy practical application. Presented at the Multidisciplinary Management of Spasticity Conference, Department of Orthopedic Surgery, Wake Forest Medical School, April 25, 2008.

Charles, JC, Gordon, AM CI therapy practical applications. Presented at the Multidisciplinary Management of Spasticity Conference, Department of Orthopedic Surgery, Wake Forest Medical School, April 24, 2008.

Gordon, AM, Charles, J “Constraint-induced therapy versus bimanual therapy in cerebral palsy” Presented at the Annual meeting of the Association of Academic Physiatrists, Anaheim, CA, February 23, 2008.

Charles, J, Gordon, AM “Structured Practice to improve upper extremity function in children with hemiplegia” Presented at the APTA Section on Pediatrics Research Summit II: Early Intervention for Children with or at Risk for Physical Disabilities, Washington, DC, October 26, 2007.

Charles, J, Gordon, AM 2007 Gayle G. Arnold Award for the Best Scientific Paper: Efficacy of Hand-Arm Intensive Bimanual Training (HABIT) on Upper Extremity Movement in Children with Hemiplegic Cerebral Palsy” Presented at the Annual Meeting of the American Academy of Cerebral Palsy and Developmental Medicine, Vancouver, BC, Canada, October 13, 2007.

Gordon, AM, Charles, J “Rehabilitation of the upper extremity in children with cerebral palsy” Presented at the Biophysics Institute, Federal University, Rio de Janeiro, August 14, 2007.

Gordon, AM “Constraint-based therapy in children with hemiplegia” Presented at the Children’s National Rehabilitation Hospital, Washington, DC, July 25, 2007.

Gordon, AM “Mechanisms underlying manual impairment in children with cerebral palsy” Presented at Rehabilitation of hand function in cerebral palsy workshop, Jerusalem, Israel, May 28, 2007.

Gordon, AM, Charles, J “Constraint-induced movement therapy in children with cerebral palsy” Presented at Rehabilitation of hand function in cerebral palsy workshop, Jerusalem, Israel, May 28, 2007.

Gordon, AM, Charles, J “Bimanual control and training in children with cerebral palsy” Presented at Rehabilitation of hand function in cerebral palsy workshop, Jerusalem, Israel, May 28, 2007.

Gordon, AM, Charles, J “HABIT” Presented at The Meshi School, Jerusalem, Israel, May 27, 2007.

Gordon, AM, Charles, J “Rehabilitation of the upper extremity in children with cerebral palsy” Presented at the Nijmegen Institute for Cognitive Information, Radboud University, Nijmegen, The Netherlands, March 14, 2007.

Gordon, AM, Charles, J “Intensive unimanual and bimanual training in children with congenital hemiplegia” Presented at the Department of Pediatrics, Columbia University Medical Center, New York, NY , February 16, 2007.

Gordon, AM. “Hand motor control” Presented at the Neuro Cognition Laboratory, Beijing Normal University, Beijing, China, August 30th, 2006.

Charles, J, Gordon, A. “The Efficacy of Intense Practice on Upper Extremity Movement in Children with Hemiplegic Cerebral Palsy” Presented at the Annual Margaret Jones Cerebral Palsy Conference, Center for Cerebral Palsy, University of California Los Angeles, Los Angeles, CA, April 22, 2006.

Gordon, AM, Charles, J “Upper extremity rehabilitation in children with cerebral palsy” Presented at the Mayo Clinic, Scottsdale, AZ, April 20, 2006.

Gordon, AM “Integration of Grasp and Whole-Body Control” Presented at the Department of Kinesiology, Arizona State University, Tempe, AZ, April 19, 2006.

Wolf, SL, Gordon, AM “Constraint-induced therapy in children and adults” Collaborative Evaluation of Rehabilitation in Stroke Across Europe Meeting, Catholic University, Leuven, Belgium, February 11, 2006.

Charles, J, Gordon, AM “Intensive practice therapies in children with hemiplegia” Presented at Rehabilitation der Handfunktion, St. Mauritius Therapieklinik, Meerbusch, Germany, April 23, 2005.

Gordon, AM, Charles, J “Learning to move: Constraint-induced movement therapy in children with cerebral palsy” Presented at the International Workshop on Reorganization of Hand Function in Children with Brain Lesions: Models of Recovery and Therapeutic Strategies, Pisa, Italy, December 2, 2004.

Gordon, AM, “Neural Representation of Hand Function” Invited Panelist, Institute of Electrical and Electronics Engineers (IEEE) Engineering in Medicine and Biology Society Annual Meeting, San Francisco, CA, September 4, 2004.

Gordon, AM, Charles, J (Keynote Speaker) "Can you Picture an Upper Extremity Intervention Affecting the Trunk? Constraint-induced Therapy in Children with Hemiplegic Cerebral Palsy." Presented at the Posture in the picture: On the relevance of postural control in children with developmental motor disorders international meeting, Groningen, The Netherlands, June 19, 2004.

Gordon, AM "Internal models underlying object motion" Presented at the Department of Psychology, Royal Holloway, University of London, Egham, UK April 7, 2004.

Gordon, AM "Internal models underlying prehensile behaviors" Presented at the Action Club, Department of Kinesiology, Pennsylvania State University, State College, PA, October 24, 2003.

Gordon, AM "Effector specificity of internal models underlying manipulation" Presented at the National Science Foundation IGERT Seminar Series, Arizona State University, Tempe, AZ, October 16, 2003.

Raghaven, P, Krakauer, J, Gordon, AM "Control of precision grip after stroke" Presented at the Chicago Rehabilitation Institute, Northwestern University, Chicago, IL, October 10, 2003.

Raghaven, P, Gordon, AM "Novel assessment tools for characterizing hand recovery in stroke patients. Presented at Burke Rehabilitation Hospital, White Plains, NY, July 3, 2003.

Gordon, AM "Upper extremity motor control in children with cerebral palsy" Presented at the Conférence Internationale sur la Paralyse Cérébrale, Quebec City, Canada, April 30, 2003.

Gordon, AM, Charles, J "Methodology of a Pediatric Constraint-Induced Therapy Intervention Study" Presented at the Pediatric Research Roundtable, Combined Sections of the American Physical Therapy Association Annual Meeting, Tampa, FL, February 12, 2003.

Raghaven, P, Gordon, AM "Motor learning and control in stroke. Presented at the Conference on Advances in Neurorehabilitation, Mount Sinai Medical Center, New York, NY, November 23, 2002.

Gordon, AM "Constraint-induced therapy in children with hemiplegic cerebral palsy" Presented at the Annual Meeting of the European Academy of Childhood Disability/Sven Jerring Symposium, Göteborg, Sweden, October 13, 2001.

Gordon, AM "So what happens after you constrain the arm following constraint-induced therapy? Presented at the Neuropediatric Research Unit, Astrid Lindgren Children's Hospital, Stockholm, Sweden, October 9, 2001.

Gordon, AM "Restoration of hand function in children with cerebral palsy" Presented at Montreal Children's Hospital, Montreal, Canada, March 27, 2001

Gordon, AM "Hand function in children with cerebral palsy" Presented at the School of Physical & Occupational Therapy, McGill University, Montreal, Canada, March 26, 2001

Charles, J, Gordon, AM “Therapeutic interventions in children with Cerebral palsy” Presented at the Stanley S. Lamm Institute for Child Neurology and Developmental Medicine, Brooklyn, NY, February 13, 2001.

Gordon, AM “The hand as a window into the mind” Presented at the Department of Kinesiology, Louisiana State University, Baton Rouge, Louisiana State University, November 6, 2000.

Charles, J, Gordon, AM “Constraint induced movement therapy as an intervention for children with cerebral palsy” Presented at the Rusk Institute of Rehabilitation Medicine, New York University Medical Center, August 30, 2000.

Gysin, P, Gordon, AM “Let the fingers do the walking: coordination of object transport during gait.” Presented at the Department of Neurology, University of Berne, Berne, Switzerland, May 22, 2000.

Gordon, AM “What does the brain think about the hand?” Presented at the Infant Development Laboratory, Department of Psychology, New York University, New York, NY, April 27, 2000.

Rao, AK, Gordon, AM “Frames of reference for arm movements” Presented at the Department of Biomedical engineering, Johns Hopkins University, Baltimore, MD, January 28, 2000.

Gordon, AM “How to get and keep grants” Presented at Seton Hall University, Orange, NJ, November 19, 1999.

Muratori, L, Gordon, AM “Coordination of precision grip in multiple system atrophy.” Presented at Universidad Clinica de Navarra, Pomplona, Spain, November 2, 1999.

Gordon, AM “Hand motor control in patients with basal ganglia disorders.” Presented at the Department of Neurology, University of Münster, Münster Germany, June 22, 1999.

Gordon, AM, “Grasping disability in children with cerebral palsy” Presented at the Department of Physical Therapy, New York University, New York, NY, May 6, 1998.

Gordon, AM, “Manipulation skills in children with cerebral palsy: Implications of current research on rehabilitative and educational practice” Presented for the New York City Board of Education Physical/Occupational Therapists, July 30, 1997.

Gordon, AM, “Motor control of the hand: From theory to practice” Presented at New Jersey School of Medicine & Dentistry, Newark, NJ, November 28, 1996.

Gordon, AM, “Learning and control of movement sequences” Presented at the Center for Molecular and Behavioral Neuroscience, Rutgers University Medical School, Newark, NJ, June 7, 1996.

Gordon, AM, "Sensorimotor coordination of the hand" Presented at the Department of Kinesiology, University of Colorado, Boulder, CO, February 24, 1995.

Gordon, AM, "Sensorimotor control of hand movement" Presented at Teachers College, Columbia University, New York, NY, February 16, 1995.

Gordon, AM, "Coordination of the fingers: Implications for prosthetics" Presented at the Department of Orthopedics, Mayo Clinic/Medical School, Rochester, MN, January 18, 1995.

Gordon, AM "Learning and parameterization of movement sequences" Presented at the Barrow Neurological Institute, Phoenix, AZ, May 6, 1994.

Gordon, AM "Movement patterns during learning" Presented at the Exercise and Sport Research Institute, Arizona State University, Tempe, AZ, May 5, 1994.

Gordon, AM "Sensorimotor control of the hand" Presented at the Department of Kinesiology, University of Maryland, College Park, MD, March 22, 1994.

Gordon, AM "Sensorimotor Integration during the programming of precision grip." Presented at the Department of Kinesiology, University of Wisconsin, Madison, WI, March 20, 1992.

Gordon, AM "Control of finger force during grasping." Presented at the Department of Physiology, University of Minnesota, Minneapolis, MN, March 18, 1992.

Gordon, AM "Sensorimotor control of isometric fingertip forces during object manipulation." Presented at the Center for Neurobiology and Behavior, Columbia University, New York, NY, February 14, 1992.

Gordon, AM "Visual control of prehension." Presented at the Department of Psychology, State University of New York at Binghamton, Binghamton, NY, September 27, 1991.

Gordon, AM "Development of anticipatory control mechanisms for manipulation." Presented at the International Sven Jerring Symposium: Theory and Practice in the Treatment of Children with Movement Disorders, Stockholm, Sweden, August 27, 1991.

Gordon, AM "Development of hand motor control." Colloquium presented at the University of Umeå, Department of Psychology, Umeå, Sweden, February 3, 1991.

Gordon, AM "Motor programs and rapid control of hand movements." Colloquium presented at the University of Umeå, Department of Physiology, Umeå, Sweden, February 1, 1990.

Gordon, AM "Visual size cues in the programming of manipulative forces during precision grip." Colloquium presented at the University of Umeå, Department of Physiology, Umeå, Sweden, February 1, 1990.

PAPERS PRESENTED AT PROFESSIONAL MEETINGS (ABSTRACTS)

Zhang, W, Gordon, AM, Fu, Q, Santello, M, Learning transfer of mapping between digit position and force in two-digit object manipulation. Society for Neuroscience Annual Meeting, Chicago, IL, October 19, 2009.

Hung, YC, Gordon, AM, Improved coordination of a bimanual draw-opening task after intensive unimanual and bimanual therapy. Presented at the Annual Meeting of the American Academy of Cerebral Palsy and Developmental Medicine, Scottsdale, AZ, September 24, 2009

Friel, KM, Gordon, Asymmetry of cerebral peduncles is correlated with hand function, but not efficacy of intensive therapy, in children with hemiplegic cerebral palsy. To be presented at the Society for Neuroscience Annual Meeting, Washington, DC, November 15, 2008.

Charles, J, Gordon, AM, Specificity of intensive upper extremity training in children with hemiplegic cerebral palsy. Presented at the Annual Meeting of the American Academy of Cerebral Palsy and Developmental Medicine Annual, Atlanta, GA, September 16, 2008.

Hung, YC, Gordon, AM Quantification of movement patterns and stereotypy during bimanual control in children with hemiplegic cerebral palsy. Presented at the Annual Meeting of the American Academy of Cerebral Palsy and Developmental Medicine Annual, Atlanta, GA, September 16, 2008.

Prabhu, S, Gysin, P, Diermayr, G, Gordon, AM, Coordination of fingertip forces in object transport during gait in children with hemiplegic cerebral palsy. Presented at the Annual Meeting of the American Academy of Cerebral Palsy and Developmental Medicine Annual, Atlanta, GA, September 16, 2008.

Petra, E, Gordon, AM, Measurement of digit individuation in children with hemiplegic cerebral palsy. Presented at the Annual Meeting of the American Academy of Cerebral Palsy and Developmental Medicine Annual, Atlanta, GA, September 16, 2008.

Chinnan, A, Gordon, A, Intensive unimanual and bimanual training in children with hemiplegia yield more frequent use of the involved hand during bimanual tasks measured by accelerometry. Presented at the Annual Meeting of the American Academy of Cerebral Palsy and Developmental Medicine Annual, Atlanta, GA, September 16, 2008.

Gordon, AM, McIsaac, TL, Muratori, L, Santello, M (2007). Impaired anticipatory control of force sharing patterns during multi-digit grasping in Parkinson disease. Presented at the Society for Neuroscience Annual Meeting, San Diego, CA, November 3, 2007.

McIsaac, TL, Santello, M, Gordon, AM (2007). Multi-digit control of grasp with changes in object texture and constraints on task accuracy. Presented at the Society for Neuroscience Annual Meeting, San Diego, CA, November 3, 2007.

Albert, F, McIsaac, TL, Diermayr, G, Gordon, AM (2007). Predictive control of grasping during gait in people with Parkinson's disease. Presented at the Society for Neuroscience Annual Meeting, San Diego, CA, November 3, 2007.

Steenbergem, B, Charles, J, Gordon, AM. Bimanual fingertip force control in hemiplegic cerebral palsy. Presented at the Progress in Motor Control Meeting, Santos, Brazil, August 11, 2007.

Diermayr, G, Gysin, P, Hass, CH, Gordon, AM. "Anticipatory Adjustments in Fingertip Forces during Gait Initiation while Holding an Object." Presented at the Society for Neuroscience Annual Meeting, Atlanta, GA, October 15, 2006.

Raghavem P, Santello, M, Krakauer, JK, Gordon, AM. "Hand shaping during grasp after stroke." Presented at the Society for Neuroscience Annual Meeting, Atlanta, GA, October 15, 2006.

Gordon, AM, Boyd, R. "Instructional Course: Models of upper limb training in children with Cerebral Palsy - Do we achieve what we want?" Presented at the American Academy of Cerebral Palsy and Developmental Medicine Annual Meeting, Boston, MA, September 15, 2006.

Charles, J, Gordon, AM "Hand-Arm Intensive Bimanual Therapy (HABIT) in Children with cerebral palsy. Presented at the American Academy of Cerebral Palsy and Developmental Medicine Annual Meeting, Boston, MA, September 15, 2006.

Charles, J, Gordon, AM "Efficacy of intensive practice on upper extremity movement in children with hemiplegia" Presented at the European Academy of Childhood Disability, Monaco, November 21, 2005.

Steenbergen, B, Charles, J, Gordon, AM "Impaired sensorimotor integration during grasping in children with hemiplegic cerebral palsy." Presented at the European Academy of Childhood Disability, Monaco, November 21, 2005

Ansuini, C, Santello, M, Massaccesi, S, Gordon, AM, Castiello, U "Intended use of object affects the modulation of hand shaping." Presented at the Society for Neuroscience Annual Meeting, Washington, DC, November 12, 2005.

Garvey, MA, Ramey, SL, Echols, K, Deluca, S, Gordon, AM "Designing a Multi-Center Trial to Examine Pediatric Intensive Movement Therapy with Constraint" Presented at the American Academy of Cerebral Palsy and Developmental Medicine Annual Meeting, Orlando, FL, September 14, 2005.

Charles, J, Wolf, SL, Gordon, AM "Efficacy of intensive uni-manual and bimanual practice on upper extremity movement in children with hemiplegia" Presented at the III-Step Conference, Salt Lake City, UT, July 22, 2005.

Muratori, LM, Dapul, GP, Gordon, AM "Coordination of posture and grasp in individuals with Parkinson's disease." Presented at the International Society for Postural and Gait Research XVIIth Conference, Marseille, France, June 2, 2005.

Gysin, Kaminski, TR, Hass, CH, Gordon, AM "Effects of predictable and unpredictable gait perturbations on grip force coordination of a hand-held object." Presented at International Society for Postural and Gait Research XVIIth Conference, Marseille, France, June 2, 2005.

Rabin, E, Muratori, L, Gordon, AM “Integration of tactile and muscle stretch cues in Parkinson's disease.” Presented at the Society for Neuroscience Annual Meeting, San Diego, CA, October 27, 2004.

Lamberg, EM, Mateika, JH, Raghaven, P, Gordon, AM “Planned respiratory alterations during discrete lifting.” Presented at the Society for Neuroscience Annual Meeting, San Diego, CA, October 24, 2004.

Gysin, P, Kaminski, TR, Gordon, AM “Coupling of grip and inertial forces under asymmetric locomotor transport conditions.” Presented at the Society for Neuroscience Annual Meeting, San Diego, CA, October 24, 2004.

Petra, E, Raghaven, P, Gordon, AM “Digit individuation and manual dexterity in individuals with stroke.” Presented at the Society for Neuroscience Annual Meeting, San Diego, CA, October 24, 2004.

Rabin, E, Gordon, AM “Tactile and muscle spindle cues are integrated based on context that specifies tactile spatial properties and the effector. Presented at The Neural Control of Movement Society Annual Meeting, Barcelona, Spain, March 30, 2004.

Raghaven, P, Krakauer, J, Gordon, AM “Hand motor control in stroke”. Presented at the Association of Academic Physiatrists, San Antonio, TX, February 26, 2004.

Hung, Y-C, Charles, J, Gordon, AM “Bimanual coordination during a goal-directed task in children with hemiplegic cerebral palsy.” Presented at the Combined Sections of the American Physical Therapy Association Annual Meeting, Nashville, TN, February 6, 2004.

Gordon, AM, Muratori, L, Santello, M “Coordination of multiple digit forces in Parkinson's disease” Presented at the Society for Neuroscience Annual Meeting, New Orleans, LA, November 8, 2003.

Raghaven, P, Krakauer, JW, Gordon, AM “Control of precision grip after stroke” Presented at the Society for Neuroscience Annual Meeting, New Orleans, LA, November 10, 2003.

Gill, S, Charles, J, Gordon, AM “The Use of Accelerometers to Quantify Upper Extremity Use in Children with Hemiplegic Cerebral Palsy” Presented at the American Academy of Cerebral Palsy and Developmental Medicine Annual Meeting, Montreal, Canada, September 10, 2003

Charles, J, Gordon, AM “Modification of Constraint-Induced Movement Therapy for Children with Hemiplegic Cerebral Palsy” Presented at the American Academy of Cerebral Palsy and Developmental Medicine Annual Meeting, Montreal, Canada, September 10, 2003

Muratori, LM, Depaul, G, Gordon, AM “Coordination of posture and grasp in individuals with Parkinson's disease” Presented at the Annual Meeting of the American Physical Therapy Association, Washington, DC, June 20, 2003.

Gordon, AM, "Contribution of tactile afferents to arm and hand accuracy" Presented at The Neural Control of Movement Society Annual Meeting, Santa Barbara, CA, April 26, 2003.

Roy, S, Raghaven, P, Gordon, AM "Acquisition of touch typing" Presented at the Neural Control of Movement Society Annual Meeting, Santa Barbara, CA, April 23, 2003.

Lamberg, E, Mateika, JM, Gordon, AM "Internal representations underlying respiration during object manipulation" Presented at the Neural Control of Movement Society Annual Meeting, Santa Barbara, CA, April 23, 2003.

Rabin, E, Gordon, AM "Tactile contribution to arm proprioception" Presented at the Neural Control of Movement Society Annual Meeting, Santa Barbara, CA, April 23, 2003.

Nilsen, D, Gordon, AM "The effect of body orientation on a pointing movement" Presented at the Annual Conference of American Occupational Therapy Association, Miami Beach, FL, May 4, 2002.

Grigos, M, Saxman, J, Gordon, AM "Speech motor control during acquisition of the voicing contrast" Presented at the Conference on Motor Speech, Williamsburg, VA, March 14-17, 2002.

Salimi, I, Troutman, A, Gordon, AM "Multiple internal representations for object features underlying grasping" Presented at the Society for Neuroscience Annual Meeting, San Diego, CA, November 11-15, 2001

Roy, S, Gordon, AM "Kinematic analysis of typing acquisition" Presented at the Society for Neuroscience Annual Meeting, San Diego, CA, November 11-15, 2001

Reilmann, R, Kirsten, F, Henningsen, H, Quinn, L, Marder, K, Gordon, AM "Assessment of choreatic movements in Huntington's disease" Presented at the Society for Neuroscience Annual Meeting, San Diego, CA, November 11-15, 2001.

Schettino, LF, Adamovich, SV, Gordon, AM, Poizner, H "The role of the transport phase during grasping tactilely-defined target shapes. Presented at the Society for Neuroscience Annual Meeting, San Diego, CA, November 11-15, 2001.

Reilmann, R, Duff, SV, Henningsen, H, Gordon, AM, "Independent finger force control in children with cerebral palsy and its implications for rehabilitation", Presented at the American Academy of Neurology, Philadelphia, PA, May 6, 2001

Duff, SV, Gordon, AM, "Effect of Practice on Anticipatory Control in Children with Hemiplegia" Presented at the American Occupational Therapy Association Annual Meeting, Philadelphia, PA, April 21, 2001.

Reilmann, R, Kirsten, F, Henningsen, H, Quinn, L, Marder, K, Gordon, AM "Variability of isometric grip forces in Huntington's disease: a correlation with cognitive deficits" Presented at the Parkinson's Disease Conference, Bochum, Germany, March 9, 2001.

Reilmann, R, Kirsten, F, Henningsen, H, Quinn, L, Marder, K, Gordon, AM “Variability of isometric grip forces in Huntington’s disease: a correlation with cognitive deficits” Presented at the Parkinson’s Disease Conference, Bochum, Germany, March 9, 2001.

Reilmann, R, Kirsten, F, Henningsen, H, Quinn, L, Marder, K, Gordon, AM “An objective quantitative, neurophysiological method to assess involuntary choreatic movements in Huntington’s disease” Presented at the Parkinson’s Disease Conference, Bochum, Germany, March 9, 2001.

Duff, SV, Gordon, AM, Gentile, AM “Effect of practice on anticipatory control during grasping in children with hemiplegia” Presented at the Combined Sections of the American Physical Therapy Association Annual Meeting, San Antonio, TX, February 17, 2001.

Reilmann, R, Pisano, N, Kirsten, F, Henningsen, H, Gordon, AM “Individuation of fingertip forces during an isometric whole-hand task” Presented at the Society for Neuroscience Annual meeting, New Orleans, LA, November 9, 2000.

Salimi, I, Frazier, W, Gordon, AM “Visual cues and digit specificity during precision grip” Presented at the Society for Neuroscience Annual meeting, New Orleans, LA, November 9, 2000.

Gysin, P, Kaminski, TR, Gordon, AM “Grip force coordination for object transport during locomotion.” Presented at the Society for Neuroscience Annual meeting, New Orleans, LA, November 9, 2000.

Reilmann, R, Kirsten, F, Gordon, AM, Quinn, L, Marder, K, Henningsen, H “Objective quantitative analysis of chorea in Huntington’s patients.” Presented at the German Neurological Society, Baden-Baden, Germany, September 27, 2000.

Duff, SV, Gordon, AM “Anticipatory control during grasping of familiar objects in children with hemiplegic cerebral palsy.” Presented at the American Academy of Cerebral Palsy and Developmental Medicine Annual Meeting, Toronto, Canada, September 16, 2000.

Muratori, L, Reilmann, R, Gordon, AM “Coordination of object transport in subjects with multiple system atrophy. Presented at the 6th International Congress of Parkinson’s Disease and Movement Disorders, Barcelona, Spain, June 15, 2000.

Reilmann, R, Quinn, L, Marder, K, Gordon, AM “Kinematic and kinetic analysis of choreic movements in subjects with Huntington’s disease.” Presented at the 6th International Congress of Parkinson’s Disease and Movement Disorders, Barcelona, Spain, June 15, 2000.

Gordon, AM, Catalano, S, Mateika, JH “Coupling of motor and respiratory control during object manipulation.” Presented at the Society for Neuroscience Annual meeting, Miami Beach, FL, October 27, 1999.

Salimi, I, Hollender, I, Frazier, W, Gordon, AM “Digit specificity during precision grip.” Presented at the Society for Neuroscience Annual meeting, Miami Beach, FL, October 27, 1999.

Reilmann, R, Gordon, AM, Henningsen, H “Sensorimotor integration in whole-hand grasping is not digit specific.” Presented at the Society for Neuroscience Annual meeting, Miami Beach, FL, October 27, 1999.

Roy, S, Parasher, R, Gordon, AM “Acquisition of skilled typing movements.” Presented at the Society for Neuroscience Annual meeting, Miami Beach, FL, October 27, 1999.

Gordon, AM, Duff, SV “Clinical predictors of fine manipulative control in children with hemiplegic cerebral palsy.” Presented at the American Academy of Cerebral Palsy and Developmental Medicine Annual Meeting, Washington, DC, September 18, 1999.

Charles, JR, Taub, E, Gordon, AM “The effects of constraint induced therapy on fingertip force coordination during grasping in children with hemiplegic cerebral palsy. Presented at the APTA Combined Sections Annual Meeting, Seattle, WA, February 2, 1999.

Mateika, JH, Catalano, S, Gordon, AM “Coordination of breathing and object manipulation” Presented at the Society for Neuroscience Annual meeting, Los Angeles, CA, November 8, 1998.

Reilmann, R, Gordon, AM, Henningsen, H “The coordination of fingertip forces during whole hand grasping” Presented at the Society for Neuroscience Annual meeting, Los Angeles, CA, November 8, 1998.

Rao, AK, Gordon, AM, Gentile, AM “Frames of reference for sensorimotor integration in hand orientation movements. Presented at the Society for Neuroscience Annual meeting, Los Angeles, CA, November 8, 1998.

Reilmann, Quinn, L, R, Marder, K, Gordon, AM “Coordination of manipulative forces in Huntington’s disease” Presented at the 5th International Congress of Parkinson’s Disease and Movement Disorders, New York, NY, October 12, 1998.

Muratori, LM, Reilmann, R, Gordon, AM “Coordination of fingertip forces during object manipulation in individuals with multiple system atrophy (Shy-Drager type)” Presented at the 5th International Congress of Parkinson’s Disease and Movement Disorders, New York, NY, October 11, 1998.

Quinn, L, Reilmann, R, Marder, K, Gordon, AM “Influence of different weights on object transport in Huntington’s disease” Presented at the 5th International Congress of Parkinson’s Disease and Movement Disorders, New York, NY, October 12, 1998.

Gordon, AM, Duff, SV, Charles, J “Anticipatory control of fingertip forces during object manipulation in children with hemiplegic cerebral palsy” Presented at the American Academy of Cerebral Palsy and Developmental Medicine Annual Meeting, San Antonio, TX, September 16, 1998.

Duff, SV, Gordon, AM "Sensorimotor control of the hand in children with hemiplegic cerebral palsy: Use of tactile and proprioceptive information" Presented at the American Physical Therapy Association Scientific Meeting and Exposition, Orlando, FL, June 7, 1998.

Rao, A, Gordon, AM "Contribution of tactile cues to arm proprioception" Presented at the Society for Neuroscience Annual meeting, New Orleans, LA, October 28, 1997.

Henningsen, H, Wheat, J, Mock, B, Knecht, S, Edgar, T, Gordon, A, Bushara, K, Bernstein, Z, Sorenson, J, Turski, P, Brooks, BR, "Control of variables in executed and imagined hand motor tasks in quantitative evaluation of functional MRI" Presented at the Society for Neuroscience Annual meeting, New Orleans, LA, October 28, 1997.

Gordon, AM, "Coordination of fingertip forces during object release in Parkinson's disease" Presented at the Society for Neuroscience Annual meeting, Washington, DC, November 17, 1996.

Henningsen, H, Knecht, S, Deppe, M, Fischer, M, Ende-Henningsen, B, Gordon, AM, "Interdigital control of isometric finger forces" Presented at the Society for Neuroscience Annual meeting, Washington, DC, November 17, 1996.

Dorcy, RM, Gordon, AM, Kaminsky, TR, Gentile, AM, "The effects of accuracy constraints on hand-to-mouth movements during feeding" Presented at the Society for Neuroscience Annual meeting, Washington, DC, November 20, 1996.

Gordon, AM, Flament, D, Lee, Ugurbil, K, J-H, Kim, S-G, Ebner, TJ, "Functional MRI of cortical motor areas during sequential typing movements" Presented at the Society for Neuroscience Annual meeting, San Diego, CA, November 14, 1995.

Henningsen, H, Ende-Henningsen, B, Knecht, S, Gordon, AM, "Time-dependent effects of antagonist muscle vibration on the perception of isometric finger force" Presented at the Society for Neuroscience Annual meeting, San Diego, CA, November 15, 1995.

Lee, J-H, Gordon, AM, Flament, D, Kim, S-G, Ebner, TJ, Ugurbil, K, "Functional magnetic resonance imaging of cortical motor areas during sequential typing movements" Presented at the Society of Magnetic Resonance Annual meeting, Nice, France, August 19, 1995.

Gordon, AM, Soechting, JF, Blount, JP "Role of cutaneous afferent input during rapid finger movements" Presented at the Society for Neuroscience Annual meeting, Miami Beach, FL, November 14, 1994.

Gordon, AM, Casabona, A, Soechting, JF "Sequential movement patterns during the learning of typing responses" Presented at the Society for Neuroscience Annual meeting, Washington, DC, November 11, 1993.

Iwasaki, N, Gordon, AM, Ingvarsson, PE, Johansson, RS, Forssberg, H "Action tremor during grasping in subjects with Parkinson's disease." Presented at the 15th Annual European Neuroscience Association Meeting Satellite Symposium on: Neural control of eye, hand and limb movements, Munich, Germany, September 10, 1992.

Ingvarsson, PE, Gordon, AM, Steg, G & Forssberg, H "Basic coordination and programming of manipulative forces in patients with Parkinson's disease. Presented at the 10th International symposium on Parkinson's disease, Tokyo, Japan, October 29, 1991.

Gordon, AM "Developmental aspects of precision grip." Presented at the European Brain and Behaviour: European Training Program Winter School, Zuoz, Switzerland, January 8, 1991.

Eliasson, AC, Gordon, AM, & Forssberg, H "Basic coordination of manipulative forces in children with cerebral palsy." Presented at the European Brain and Behaviour: European Training Program Winter School, Zuoz, Switzerland, January 8, 1991.

Gordon, AM, & Shea, JB "The role of start position and increased spring-load in the acquisition and retention of limb positioning." Presented at the 13th Annual European Neuroscience Association Meeting Satellite Symposium on: Control of Arm Movements in Space: Neurophysiological and Computational Approaches, Spoleto, Italy, September 14, 1990.

Gordon, AM, Forssberg, H, & Eliasson, AC "The integration of size-related information in the programming of manipulative forces during precision grip." Presented at the 13th Annual Meeting of the European Neuroscience Association, Stockholm, Sweden, September 9, 1990.

Gordon, AM, & Forssberg, H "Development of precision grip: adaptation to visual-Size cues." Presented at the 13th Annual Meeting of the European Neuroscience Association, Stockholm, Sweden, September 9, 1990.

Eliasson, AC, Gordon, AM, & Forssberg, H "The programming of manipulative forces in children with cerebral palsy." Presented at the 13th Annual Meeting of the European Neuroscience Association, Stockholm, Sweden, September 9, 1990.

Gordon, AM "Sensory motor integration & associative transformations in the programming of precision grip." Presented at Special Interest Session: Motor Development, the 13th Annual Meeting of the European Neuroscience Association, Stockholm, Sweden, September 8, 1990.

Gordon, AM, & Christina, RW "Programming time as a function of movement constraint." Presented at American Alliance for Health, Physical Education, Recreation and Dance (AAHPERD) National Convention, Boston, MA, April 22, 1989.

Rosenbaum, DA, Inhoff, AW, & Gordon, AM "A hierarchical editor model for choosing between movement sequences." Presented at the 24th Annual Meeting of the Psychonomic Society, San Diego, CA, November 11, 1983.

Gordon, AM "Perception of voluntary movement." Colloquium presented at Hampshire College School of Communications and Cognitive Science, Amherst, MA, April 30, 1983.

Gordon, AM "Application of signal detection theory to motor control." Presented at the 36th Annual Psychology and Education Conference, Mount Holyoke College, South Hadley, MA, April 23, 1983.

PRESENTATIONS AT AFFILIATED INSTITUTIONS

Gordon, AM "A Survival Guide to Constraint-Induced Therapy in Children" Presented at the 27th Annual Conference in Movement Sciences, Constraint-induced Movement Therapy in Children and Adults: Evidence-Based Practice or Hype? Teachers College, Columbia University, May 16, 2004.

Gordon, AM, Charles, J, "Learning approach to motor skill acquisition" Presented at When Worlds Collide: Promises and Realities Conference, Teachers College, Columbia University, March 2, 2001.

Gordon, AM, Charles, J, "Application of hand motor control research to intervention development in children with cerebral palsy." Presented at Physical Disabilities in Preschool and School-aged Children Conference, Teachers College, Columbia University, April 15, 2000.

Gordon, AM, "Regulation of fingertip forces during object manipulation in children with cerebral palsy" Presented at Motor Development in Infancy and Early Childhood Conference, at Teachers College, Columbia University, April 19, 1998.

Gordon, AM, "Bilateral impairments in grasping forces during object manipulation in children with congenital hemiplegia. Presented at the Department of Rehabilitation Medicine Research Forum, Columbia Presbyterian Medical Center, New York, NY, March 31, 1998.

Gordon, AM, "Grasping deficits in Parkinson's disease" Presented at Movement Disorders Associated with Aging, Conference at Teachers College, Columbia University, April 5, 1997.

Gordon, AM, "Tactile afferent information during movement sequences" Presented at the Department of Physiology, University of Minnesota, Minneapolis, MN, May 19, 1995.

Gordon, AM "Learning of novel movement sequences" Presented at the Department of Physiology, University of Minnesota, Minneapolis, MN, April 29, 1994.

Gordon, AM "Development of reach to grasp" Seminar conducted for motor behavior interest group, Department of Kinesiology and Leisure Studies, University of Minnesota, Minneapolis, MN, April 18, 1994.

Gordon, AM "Coordination of finger-tip forces during manipulation in Parkinson's disease" Presented at the Department of Neurology, University of Minnesota, Minneapolis, MN, February 9, 1993.

Gordon, AM "Sensorimotor integration during the programming of human movement." Presented at the Nobel Institute for Neurophysiology, Karolinska Institute, Stockholm, Sweden, August 25, 1991.

Gordon, AM "Control strategies during grasping" Presented at the symposium on Motor control for reaching and grasping: Developmental and pathophysiological aspects, Karolinska Hospital, Stockholm, Sweden, May 17, 1991.

Gordon, AM, & Forssberg, H "Sensorimotor control of grasping." Presented at the "Brain Day" Symposium, Karolinska Hospital, Stockholm, Sweden, February 7, 1991.

Gordon, AM, Eliasson, AC, & Forssberg, H "Isometric force development in children." Presented at the "Brain Day" Symposium, Karolinska Hospital, Stockholm, Sweden, February 7, 1991.

Gordon, AM "Grasping in children and adults: From research to treatment." Presented at the Department of Physical Therapy, Karolinska Hospital, Stockholm, Sweden, November 20, 1990.

Gordon, AM "Dissociation between perception and action during precision grip." Presented at the Nobel Institute for Neurophysiology, Karolinska Institute, Stockholm, Sweden, March 1, 1990.

Gordon, AM "An SRT approach to motor programming: An Historical Review." Colloquium presented at the Karolinska Hospital Department of Pediatrics, Stockholm, Sweden, September 22, 1989.

TEACHING AND ADVISING

Courses Taught

Advanced Topics in Neuromotor Processes: Neural Control of Hand Movement (Fall 1995)

Advanced Topics in Neuromotor Processes: Movement Disorders (Fall 1996)

Advanced Topics in Neuromotor Processes: Sensorimotor integration (Fall 1997)

Advanced Topics in Neuromotor Processes: Neural control of arm movement (Fall 2000)

Advanced Topics in Neuromotor Processes: Constraint-induced movement therapy (Fall 2001)

Advanced Topics in Neuromotor Processes: Neuroplasticity (Fall 2008)

Analysis of Human Movement (Fall 1995-present)

Research Training in Motor Learning and Control (Fall and Spring 1995-present)

Seminar in Neuromotor Processes: Motor Development in Infancy and Early
Childhood (Spring 1998)

Analysis of Biomechanical Signals (Summer A 1996)

Movement Disorders (Spring 1999)

Seminar in Neuromotor Processes: Preschool- and School-aged Children with Physical
Disabilities (Spring 2000)

Brain and Behavior I (Spring 2000-present)

Project Advisement of M.A. Students

Laura Yeo (1997-1998)
 Victor Caamaño (1997-1999)
 Elaine Manganello (1998-1999)
 Sarah Lewis (1999-2001)
 Priska Gysin Peier (1999-2000)
 Ya-Ching Hung (2000-2001)
 Maria Lucia Rojas (2000-2002)
 Katie Leinart (2000-2001)
 Rachel Zoffness (Clinical Psychology, 2001)
 Quynh Phan-Tran (2002-2003)
 Salome Brooks (2003-2004)
 Kristie Lynch (2005-2006)
 Camilla Hsiung (Clinical Psychology, 2006-2007)
 Meriden Daly (Neuroscience & Education, 2008)
 Pam Wareham (Neuroscience & Education, 2008)
 Albany Perez (Clinical Psychology, 2009-present)
 Marina Stohl (Clinical Psychology, 2009-present)
 Cherie Kuo (Neuroscience & Education 2009)
 Scott Willingham (2008-2010)
 Violet George (2008-2009)

Research Advisement of Advanced Masters (Ed.D.) Students

Edith Naas (1996-1998)^a
 Robert Dorcy (1996-1999)
 Robert Narcessian (1998)
 Shourin Roy (1997-2003)
 Lisa Muratori (1997-2000)
 Dawn Nilsen (1999-2001)
 Eric Lamberg (1999-2002)
 Cheryl Bronner (1998-2002)^b
 Electra Petra (2003-2004)^b
 Kristie Lynch (2003-2006)

^a *Funded by a Dean's grant for student research*

^b *Funded by a Gerondelis Foundation Scholarship*

Research Advisement of Doctoral Students

Susan Duff (Sponsor, Motor Learning, 1995-2001)^a
 Lisa Muratori (Sponsor, Motor Learning, 1998-2004)^d
 Jeanne Charles (Sponsor, Motor Learning, 1996-2004)^{a,e}
 Michael Masjak (Committee Member, Motor Learning, 1998-2000)
 Maria Grigos (Co-sponsor, Speech Pathology, 1998-2002)^a
 Laurel Abbruzzese (Committee Member, Motor Learning, 1998-2004)^{b,c}

Catherine Curtis (Committee Member, Motor Learning, 1999-2004)
 William Werner (Committee Member, Motor Learning, 1999-2004)
 Ashwini Rao (Committee Member, Motor Learning, 1997-1999)
 Jaehee Kim (Co-sponsor, Applied Physiology, 2000-2003)
 Eric Lamberg (Sponsor, Motor Learning, 2002-2004)
 Priska Gysin Peier (Sponsor, Motor Learning, 2004-2008) ^{a,g,h}
 Gudrun Diermayr (2004-2010)
 Electra Petra (2004-present) ^{b,f}
 Ashley Chinnon (2005-present)
 Jacqueline Montes (2007-present)
 Dawn Nilsen (2008-present)
 Claudio Ferre (2009-present)
 Aviva Wolff (2009-present)

^a *Funded by a Dean's grant for student research*

^b *Funded by an NIH grant*

^c *Funded by a Gates Millennium Scholarshi*

^d *Funded By the NY Physical Therapy Foundation*

^e *Funded by an AACPD M Scholarship*

^f *Funded by a Gerondelis Foundation & Arsinoi Ioannidou Scholarship*

^g *Funded by a Spencer Research Grant*

^h *Funded By a Office of Policy and Research Grant*

Dissertation Committees

Lori Quinn (Examiner, Motor Learning, 1996) "Control of multi-joint arm movement in patients with Huntington's disease"

Andrew McDonough (Examiner, Motor Learning, 1996) "The effect of icing of anterior knee structures on torque production and alpha motoneuron excitability in the quadriceps femoris"

Ann Spungen (Examiner, Applied Physiology, 1996) "Body composition and metabolism in spinal cord injured individuals"

Y. Hsu (Examiner, Music Education, 1997) "An analysis of contributing factors to repetitive strain injury (RSI) among pianists"

Joanne Dussel-Thienes (Examiner, Physical Education, 1997) "Physical education teacher attitudes toward student teaching"

Sandra Rogers (Examiner, Music Education, 1998) "Survey of piano instructors: Awareness and intervention of predisposing factors to piano-related injuries"

Robert Martin (Committee Member, Physical Education, 1998) "A study of the reflective practices of physical education student teachers"

-
- Raju Parasher (Examiner, Motor Learning, 1998) “Planning of spatially directed movements in response to two modes of instruction”
- Katherine Higginson McVeigh (Examiner, Measurement and Statistics, 1999) “The dimensional structure of health behavior and its interactions with age and gender”
- Susan Simpkins (Committee Member, Motor Learning, 1999) “Effects of medial-lateral stability on the postural adjustments associated with reaching movements”
- Michael Majsak (Committee Member, Motor Learning, 1999) “The Bradykinesia of Patients with Parkinson’s Disease: An Impairment of the Organization of Motor Output”
- Maria Hodek (Examiner, English Education, 1999) “Teaching American/cultural studies in a central European university”
- Ashwini Rao (Committee Member, Motor Learning, 1999) “Frames of reference for sensorimotor integration in hand orientation movements”
- Moses Gostev (Chair, Science Education, 2000) “The influence of student’s cognitive preferences and instructional video on student acquisition of biological concepts”
- Amy Margolis (Examiner, School Psychology, 2000) “Working memory in procedural learning: The stimulus domain effect”
- Sui-Heung Law (Chair, Motor Learning, 2000) “Lower limb intersegmental dynamics of children and adults during unobstructed gait and stepping over an obstacle”
- Violaine Hamel (Chair, Motor Learning, 2000) “Effect of body orientation and arm support on anticipatory postural adjustments during pointing”
- Hsien-Yung Liu (Examiner, Physical Education, 2001) “The descriptive study of value orientations of physical education teachers in Taiwan, R.O.C.”
- Wendy Frazier (Examiner, Science Education, 2001) “The effect of a science work experience program for teachers on the classroom environment: A qualitative program evaluation”
- Susan Duff (Sponsor, Motor Learning, 2001) “Learning of anticipatory force scaling in children with hemiplegic cerebral palsy”
- Maria Grigos (Co-sponsor and Chair, Speech Pathology, 2002) “Speech motor development during acquisition of the voicing contrast”
- Kristen Lauer (Chair, Educational Psychology, 2002) “The effect of text structure, content familiarity, and reading ability on second graders’ comprehension of text”
- Masako Mori (Examiner, Counseling Psychology, 2002) “The role of perceived family

dysfunction in the occurrence and severity of adolescent suicidality among urban ethnic minority psychiatric outpatients”

Toshihiko Matsuka (Chair, Measurement and Statistics, 2002) “Attention Processes in computational models of category learning”

Mara Manson (Examiner, Physical Education, 2002) “Middle school student’s perception of skill level and their affect on participation in physical education”

Jae Hee Kim (Co-sponsor, Applied Physiology, 2003) “The impact of strength training on the neuromuscular function and physical performance of obese elderly women after weight loss”

Lindsay Childress-Beatty (Chair, Clinical Psychology, 2003) “Religiosity, Mysticism, and health in abused and non-abused women”

Jeffrey Scott Melendez (Committee Member, Physical Education, 2003) “The relationship between teachers’ attitude toward fitness testing and student performance on the Connecticut physical fitness assessment”

Namki Cho (Examiner, Physical Education, 2004) “Korean middle school students’ attitudes toward physical education and the relationship to their attitudes toward testing in physical education”

Laurel Daniels Abbruzzese (Chair, Motor Learning, 2004) “Postural control of concurrent reaching and stepping in older adults”

Cathleen Curtis (Committee Member, Motor Learning, 2004)

Jeanne Speckman-Collins (Examiner, Special Education, 2004) “Multiple exemplar instruction and the emergence of generative production of suffixes as autoclitic frames”

William Werner (Chair, Motor Learning, 2004) “Improving gait and promoting retention in individuals with Parkinson’s disease”

Eric Lamberg (Sponsor, Motor Learning, 2004) “Planned respiratory alterations during discrete lifting”

Lisa Muratori (Sponsor, Motor Learning, 2004) “Coordination of grasp and posture in Parkinson’s disease”

Gregory Thielman (Chair, Motor Learning, 2005) “Training with trunk restraint learning during reaching for individuals post-stroke”

Jeanne Charles (Sponsor, Motor Learning, 2005) “Constraint-induced therapy in children with cerebral palsy”

Lames Loncoy (Chair, Physical Education, 2006) “Student’s perceptions of a middle school project adventure unit”

Irene Christoforou-Gioules (Reader, Speech and Language Pathology, 2006) “The developmental coordination of respiratory movements and swallowing”

Post-doctoral fellows

Ralf Reilmann, M.D. (1997-2000)—Funded by a grant from the Deutsche Forschungsgemeinschaft (German Research Foundation) under the sponsorship of A.M. Gordon. Presently Assistant Professor, University of Munster.

Iran Salimi, Ph.D. (1998-2002)—Funded by a grant from the Canadian Medical Research Council under the sponsorship of A.M. Gordon. Currently, Project Manager, Mount Sinai Hospital.

Raji Parasher, Ed.D. (1998-2000)-- Funded by an NSF grant to A.M. Gordon. Presently Chair, Dept. of Physical Therapy, University of New Delhi .

Ashwini Rao, Ed.D. (1999-2000)— Funded by an NSF grant to A.M. Gordon. Presently Assistant Professor, Dept. of Rehabilitation Medicine, Columbia University.

Ely Rabin, Ph.D. (2001-2005)—Funded by an NIH National Research Training Award under the sponsorship of A.M. Gordon. Currently an Assistant Professor, Department of Neuroscience, New York Institute of Technology.

Preeti Raghaven, M.D. (2002-present)—Funding by a Rehabilitation Medicine Scientist Training Program grant (NIH) and NIH K01 training grant under the sponsorship of A.M. Gordon.

Kathleen Friel, Ph.D. (2006-2013) Funded by NIH K12 and K01 under the sponsorship of A.M. Gordon.

Tara McIsaac, Ph.D. (2006-2008) Funded by an NSF grant to A.M. Gordon. Will be Assistant Professor, Teachers College, Columbia University.

Frederic Albert, Ph.D. (2007-2008) Funded by the French Parkinson’s Disease Foundation. Currently Research Assistant Professor, University of Marseille.

Aleksandar Nedeljkovic, Ph.D. (2008) Funded by the University of Belgrade.

Wei Zhang, Ph.D. (2008-present) Funded by an NSF grant to A.M. Gordon.

Science Education Fellows (Funded by an NSF grant to A.M. Gordon)

Wendy Frazier (1998-99)
Evelyn Eriksson (1998-99)
Moses Gustov (1998-99)

Robert Mirchin (1999-00)
Karen Iverson (1999-00)
Nicole Pisano (1999-00)
Aubrey Troutman (2000-01)
Jennifer Lagnado (2000-01)
Purvi Vora (2001-02)

Honors Thesis and Research Advisement of Undergraduate Students

Ian Hollender (Co-advisor, Psychology, SUNY Binghamton, 1998-1999)
Dania Kafka (Co-advisor, Biology, Barnard College, 1999-2000)
Geraldine Dapul (Co-advisor, Biology, Barnard College, 2001-2002)
Mark Gilman (Landmark College, 2002)
Shaina Spira (New York University, 2002)
Jennifer Schneider (Columbia University, 2002-2003)
Stephanie Tsai (Barnard College, 2002)
Justin Wei (Columbia University, 2002-2003)
Angie Chin (Cornell University, 2002)
Aarti Sharma (New York University, 2002)
Karen Keung (New York University, 2002)
Michael Chau (New York University, 2002)
Krystal Giordano (Wesleyan University, 2002)
Lalit Bajaj (St. Johns University, 2002)
Vicky Ip (SUNY New Paltz, 2002)
Elizabeth Young (Cornell University, 2002)
Dan Fox (Wesleyan University, 2003)
Aneeta Rattan (Columbia University, 2003)
Jia Liu (Cornell University, 2003)
Payton Richardson (Yale University 2003)
Todd Liu (Columbia University, 2003-2004)
Marwa Abdalla (SUNY Stony Brook 2003)
Jasmin Ramos-Marte (Fordham University, 2003)
Samareh Ghorbani (Cornell University, 2003)
Jeremy Nikfarjam (Cornell University, 2003)
Nina Schatz-Siemers (SUNY Stony Brook, 2003)
Lori Beth Slater (Cornell University, 2003)
Philip Kim (Stanford University, 2004)
Vanessa Guzman (Columbia University, 2004)
Ambar Galvan, (Columbia University, 2004)
Teiko Nartey (St. Johns University, 2004)
Karent Zorogastua (William Patterson University, 2004)
Gina Charles (SUNY Stony Brook, 2004)
Sharrona Bloom (Yeshiva College, 2004)
Amreen Quadir (New York University, 2004)
Justina Tam (SUNY Buffalo, 2004)
Claude Grimaddau (SUNY Stony Brook, 2005)
Johanna Gomez (William Patterson, 2005)

David Furfaro (Duke University, 2006)
Daniele Gutman (George Washington University, 2006)
Rivkih Darabaner (Cornell University, 2006)
Sarah Savek (Carnegie Mellon University, 2006)
Ryan Blum (Harvard University, 2006)

Research Supervision of Student Clinicians

Florian Kirsten (Medicine, Humbolt University, 1999-2000)
Melissa Schenker (Physical Therapy, New York Medical College, 2002)
Ester Yoo (Physical Therapy, New York Medical College, 2002)
Jodi Morris (Physical Therapy, New York Medical College, 2002)
Adesole Telle (Physical Therapy, Dominican College, 2002)
Jennifer Bonelli (Speech Pathology, Teachers College, 2003)
Kevin Dunn (Physical Therapy, Dominican College, 2003)
Julia La Pointe (Nursing, Long Island University, 2003)
Zoe Rosenbaum (Medicine, SUNY Albany, 2006)

SERVICE TO THE COLLEGE AND PROFESSION

Committees

Institutional Review Board (1996-present)
Faculty Adviser, Departmental Professional Development Seminars (1996-2000)
Housing Committee (1995-1997)
Library Committee (1996-1998)
Search Committee, Department of Scientific Foundations (1996-1997)
Search Committee, Grants Officer (1997)
Search Committee, Physical Education (1997-1998)
Interdisciplinary Studies Committee (1997-present)
Retirement Committee (1998-2000)
Chair, Speech Physiology Search Committee (1998-1999)
Affirmative Action Representative, Speech and Language Development Search Committee (1999-2000)
Search Committee, Math Education (2000-2001)
Faculty Executive Committee (2000-2002, 2006)
Co-chair, Academic Programming Subcommittee, FEC (2000-2002)
Chair, Academic Programming Subcommittee, FEC (2001-2002)
Search Committee, Grants officer (2001)
Faculty Research Awards Committee (2002, 2004)
Search Committee, Speech Pathology (2001-2003)
Search Committee, Speech Pathology (2003-2004)
Search Committee, Applied Physiology (2002-2004)
Pre-tenured Mentoring Committee (2003-present)
Ad Hoc Member of Tenure Committee (2004)
Research Advisory Committee (2005-2006)
Search Committee, Applied Physiology (2006-2007)

Search Committee, Health Psychology (2006-2007)
 Elected Member, College Tenure and Promotion Committee (2006-present)
 Ad Hoc Member of Promotion to Full Professor Committee (2007)

Other Service to the College

Co-Coordinator of the Faculty Research Symposia (1996-2004)
 Panelist, The Federal Review Panel Process Workshop (2/5/2002)
 Panelist, Spencer Forum on Funding Doctoral Research (4/28/2004)

Editorial Responsibilities

Ad hoc reviewer: American Journal of Physical Medicine & Rehabilitation
 Behavioural Brain Research
 Behavioral Neuroscience
 Brain
 Brain Research
 British Journal of Developmental Psychology
 Clinical Neurophysiology
 Cognitive Brain Research
 Cognitive Processing
 Current Biology
 Developmental Medicine and Child Neurology
 Disability Research
 Ergonomics
 European Journal of Neuroscience
 Experimental Brain Research
 Experimental Neurology
 Human Brain Mapping
 Infant and Child Development
 Journal of Experimental Psychology (HPP)
 Journal of Experimental Psychology (General)
 Journal of Motor Behavior
 Journal of NeuroEngineering & Rehabilitation
 Journal of Neurology, Neurosurgery and Psychiatry
 Journal of Neurophysiology
 Journal of Neuroscience
 Journal of Rheumatology
 Motor Control
 Nature Neuroscience
 NeuroImage
 Neurology
 Neuroscience & Behavior Reviews
 Neuropsychologia
 Neuropsychology
 Neuroscience Letters
 Oxford University Press

Pediatrics
Pediatric Rehabilitation
Perception and Psychophysics
Proceedings of the Institute of Electrical and Electronics Engineers
Public Library of Science: Medicine (Academic Editor)
Psychological Bulletin
Psychological Reports: Perceptual and Motor Skills
Somatosensory and Motor Research
Stroke
Transactions on Neural Systems & Rehabilitation Engineering

Conference and panel session organization

Chaired a panel session “Development of sensory systems involved in postural control” for the Posture in the picture: On the relevance of postural control in children with developmental motor disorders international meeting, Groningen, The Netherlands, June 17, 2004.

Organized and chaired a panel session “Contribution of skin afferents to proprioception” for the Neural Control of Movement Society’s Annual Meeting, Santa Barbara, CA, April 26, 2003.

Co-organized an Annual Conference in Movement Science for clinical and educational professionals, 1996-2005.

Taught an instructional course on upper limb rehabilitation at the Annual meeting of the American Academy of Cerebral Palsy and Developmental Medicine, September 15, 2006.

Other Professional Activities

Reviewer, Division of Behavioral & Cognitive Sciences, National Science Foundation, 2009.

External Tenure Reviewer, University of Wisconsin, 2009.

External dissertation opponent, Yannick Bleyenheuft Ph.D. Committee, Université Catholique de Louvain Responsable de l' Unité de Réadaptation et de Médecine Physique Tour Pasteur, Brussels, Belgium, September 14, 2009.

External reviewer for Cincinnati Children’s Hospital evidence based clinical guidelines effort

Reviewer, Alberta Heritage Foundation Research grant, 2009.

External dissertation reviewer, Sheila Schneiberg Dias, of Physical And Occupationnal Therapy, McGill University, February 2009.

External dissertation opponent, Eugene Rameckers’ Ph.D. Committee, Kinisiology/Rehabilitation Sciences and Physiotherapy program, Catholic University, Leuven, Leuven, Belgium, January 16, 2009.

Reviewer, Thrasher Research Fund, 2008.

Reviewer, SickKids Foundation, 2008.

Developed fact sheets on evidence based practice for the United Cerebral Palsy Research and Education Foundation web site, 2007.

Reviewer, CAREER Award Program, National Science Foundation, 2007.

External Tenure Review, Louisiana State University, 2006.

Reviewer, Thrasher Research Fund, 2006.

External Dissertation Opponent, Dominique van Roon's Ph.D. Committee, Nijmegen Institute for Cognition and Information, Radboud University Nijmegen, Nijmegen, The Netherlands, December 1, 2005.

Reviewer, National Health and Medical Research Council (Australia) 2005.

Reviewer, Action Medical Research (England) 2005.

Scientific Committee, XVII Conference of the International Society of Postural and Gait Research, Marseille, France, 2005.

External Appointment Review, The Cleveland Clinic Foundation, 2005.

External Tenure Reviewer, Georgia Institute of Technology, 2004.

Reviewer, National Sciences and Engineering Research Council of Canada, 2004.

External Tenure Reviewer, New York University, 2004.

External Reviewer, Chaired Professor, Binghamton University, SUNY, 2003.

External Tenure Review, Arizona State University, 2003.

External Tenure Review, University of Miami, 2002.

External dissertation reviewer, Karen Reilly, University of Western Australia, 2001

Panel Member, Knowledge and Distributed Intelligence: Learning and Intelligent Systems Review Panel, National Science Foundation, 1998, 1999.

Reviewer, Professional Opportunities for Women in Research and Education Program, National Science Foundation, 1999, 2000.

Reviewer, Division of Integrative Biology and Neuroscience, National Science Foundation, 1999, 2001.

Reviewer, Department of Veterans Affairs, 2000.

Reviewer, Comitato Telethon Fondazione Combatti La Distrofia Muscolare E Le Altre Malattie Genetiche (Italian Muscular Dystrophy and Genetic Disorders Association), 1998.

Reviewer, Annual Symposium on Haptic Interfaces for Virtual Environment and Teleoperator Systems, 1998.

External Grants Reviewer, University of Alabama Birmingham Injury Control Research Center, 1998.

External Grants Reviewer, New Jersey School of Medicine & Dentistry, 1997.

External Grants Reviewer, University of Texas Health Sciences, 1999.

Elected to the American Academy of Cerebral Palsy and Developmental Medicine Research and Awards Committee, 1999-2004.