

BIOGRAPHICAL SKETCH

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NAME Robert J. Palisano, PT, ScD, FAPTA	POSITION TITLE Distinguished Professor Physical Therapy and Rehabilitation Sciences Drexel University, Philadelphia, PA		
eRA COMMONS USER NAME (credential, e.g., agency login) Palisano			
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable.)</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	MM/YY	FIELD OF STUDY
S.U.N.Y. at Buffalo	B.S	1971-1975	Physical Therapy
University of North Carolina at Chapel Hill	M.S.	1978-1981	Physical Therapy
Boston University	Sc.D.	1981-1985	Therapeutic Studies
McMaster University, <i>CanChild</i> Centre		1994-1995	Childhood Disability

A. Personal Statement

My research involves children and youth with cerebral palsy (CP) and their families. I have engaged in interdisciplinary research conducted in settings where children live and receive services. My early research centered on motor development of infants born preterm and measuring change in children receiving therapy services including use of goal attainment scaling. Research with colleagues at the *CanChild* Centre led to the creation and validation of the Gross Motor Function Classification System (GMFCS) for CP, which is the international standard for research with over 2,000 citations. We created and validated gross motor function curves for each of the five-levels of the GMFCS demonstrating that, on average, children with CP have achieved 90% of their motor function capacity by age 7. We demonstrated that methods of mobility of children and youth with cerebral palsy vary based on environmental and personal factors. Our findings indicate that adolescents with CP are generally satisfied with their quality of life but report relatively lower satisfaction in activities carried out to achieve personal goals. Noteworthy, quality of life was only weakly correlated with functional abilities, supporting the current view of participation as a dynamic interaction between person and environment.

The results of the research completed at *CanChild*, informed my subsequent research which has characterized activity and participation of children and youth with CP and identified child, family, and environmental determinants of participation. Through involving parents of children with CP and individuals with CP in the research process, I have come to appreciate that the concerns and priorities of children and families often differ from the perspectives of researchers. There is limited knowledge of effective interventions by which to optimize community participation and self-determination of children with CP. Furthermore, there have been no clinical trials on physical and occupational therapy interventions specifically designed to optimize the community participation of children with CP. This led colleagues and I to develop a conceptual framework and processes for a collaborative, goal-directed approach that uses real world learning opportunities to achieve goals for community participation. Collectively we refer to these processes as participation-based therapy.

Current research includes a longitudinal study to create developmental trajectories for children with CP (*On Track* Study) and a qualitative study with young adults to create guidelines for a lifecourse health development approach to promote developmental capacities for future adult roles and healthy adult living beginning in childhood.

I have advised the thesis (MS, MHS) and dissertation (PhD) research of 23 graduates, served on the advisory committee for 30 graduates, and was an external reviewer for 6 graduates of other universities. I have over 50 publications that include a student author. Several students that I advised received awards for the best thesis/dissertation in pediatrics from the American Physical Therapy Association and two received awards for the best study published in *Physical Therapy* resulting from a thesis/dissertation.

B. Positions and Employment

- 2013-Present Distinguished Professor of Rehabilitation Sciences, Drexel University, Philadelphia, PA
1997-2013 Professor, Department of Physical Therapy and Rehabilitation Sciences, Drexel University, Philadelphia, PA
1994-Present Scientist, *CanChild* Centre for Childhood Disability Research, McMaster University, Ontario, Canada
2006-Present Co-Editor: *Physical & Occupational Therapy in Pediatrics*
1994-Present Associate Editor: *Physical Therapy for Children*, Philadelphia: Elsevier (4th Edition, 2012)
2011-Present Editorial Board, McKeith Press

Professional Memberships

American Physical Therapy Association
American Academy of Cerebral Palsy and Developmental Medicine

Honors

- 2012 Marian Williams Award for Research in Physical Therapy, American Physical Therapy Association
2011 Catherine Worthingham Fellow of the American Physical Therapy Association (APTA)
2011 Knowledge Translation Leadership Award, Section on Pediatrics, APTA
2009 Keynote address, International Conference on Cerebral Palsy, Sydney, Australia
2008 Anniversary Award, Section on Pediatrics, APTA
2007 Drexel University Research/Scholarship Award
2005 Golden Pen Award, American Physical Therapy Association
2004 Saarinen Lectureship, School of Rehabilitation Science, McMaster University
2003 Keynote, Folke Bernadotte Conference, Stockholm, Sweden
2000 Excellence in Neurology, Pennsylvania Physical Therapy Association
2000 Distinguished Faculty Award, MCP Hahnemann University
1997 Research Award, Section on Pediatrics, APTA
1994-1995 Career Scientist Award, Ontario Ministry of Health
1992 Chattanooga Research Award, best clinical research report in *Physical Therapy*
1985 Doctoral Dissertation Research Award, Section on Pediatrics, APTA
1984 Therapeutic Studies Doctoral Award, Boston University

C. Selected Peer-reviewed Publications (Selected from 106 peer-reviewed publications)

Most relevant to the current application

1. **Palisano RJ**, Kang LJ, Chiarello L, Orlin M, Oeffinger D, Maggs J. Social and Community Participation of Children and Youth with Cerebral Palsy is Associated with Age and Gross Motor Function Classification. *Physical Therapy*, 89: 1304-1314, 2009
2. **Palisano RJ**, Almasri N, Chiarello L, Orlin M, Begley A, Maggs J. Family Needs of Parents of Children and Youth with Cerebral Palsy. *Child: Care, Health & Development*, 36(1): 85-92, 2010.
3. Chiarello L, **Palisano R**, Maggs J, Orlin M, Almasri N, Kang LJ, Chang H. Family Priorities for Activity and Participation of children with Cerebral Palsy. *Physical Therapy*, 90:1254-1264, 2010.
4. Maggs J, **Palisano R**, Chiarello L, Orlin M, Chang H. The Same but Different? Comparing the Priorities of Parents and Young People with Cerebral Palsy. *Disability and Rehabilitation*, 33(17-18):1650-1658, 2011
5. **Palisano RJ**, Chiarello LA, Orlin M, Polansky M, Oeffinger D, Gorton G, Bagley A. Determinants of Participation in Leisure and Recreational Activities by Children with Cerebral Palsy. *Developmental Medicine and Child Neurology*, 53(2):142-149, 2011
6. **Palisano RJ**, Orlin M, Chiarello LA, et al. Determinants of Intensity of Participation in Leisure and Recreational Activities by Youth with Cerebral Palsy. *Archives of Physical Medicine and Rehabilitation*, 92:1468-1476, 2011
7. Kang L, **Palisano RJ**, King GA, Chiarello L, Orlin MN, Polansky M. (2012). Social participation of youth with cerebral palsy differed based on their self-perceived competence as a friend. *Child: Care, Health & Development*, 38(1), 117-127.

8. Stewart D, Lawless J, Shimmell L, **Palisano RJ**, Freeman M, Rosenbaum P, Russell D. Social Participation of Adolescents with Cerebral Palsy: Trade-offs and Choices. *Physical & Occupational Therapy in Pediatrics*, 32(2): 167-179, 2012
9. **Palisano RJ**, Chiarello LA, King GA, Novak A, Stoner T, Fiss A. Participation-based Therapy for Children with Physical Disabilities. *Disability and Rehabilitation*, 34(12):1041-1052, 2012
10. Kang LJ, **Palisano RJ**, King GA, Chiarello LA. Understanding Optimal Participation of Children with Physical Disabilities: An Interactive Model. *Disability and Rehabilitation*, 36:1735-1741, 2014
11. **Palisano RJ**, Chiarello LA, Westcott McCoy S, Bartlett D, An M. Use of the Child Engagement in Daily Life and Ease of Caregiving for Children to Evaluate Change in Young Children with Cerebral Palsy. *Physical & Occupational Therapy in Pediatrics*, 35(3):280-295, 2015.
12. An M, **Palisano RJ**, Dunst CJ, Chiarello LA, Yi CH, Gracely EJ. Strategies to Promote Family-Professional Collaboration: Two Case Reports. *Disability and Rehabilitation*, published online December 15, 2015.

Selected publications of importance to the field

1. **Palisano RJ**: Validity of Goal Attainment Scaling in Infants with Motor Delays. *Physical Therapy* 73:651-660, 1993
2. **Palisano RJ**, Rosenbaum P, Walter S, Russell D, Wood E, Galuppi B: Development and Validation of a Gross Motor Function Classification System for Children with Cerebral Palsy. *Developmental Medicine and Child Neurology* 39:214-223, 1997
3. **Palisano RJ**, Hanna S, Rosenbaum P, Russell D, Walter S, Raina P, Wood E, Galuppi B: Validation of a Model of Motor Development for Children with Cerebral Palsy. *Physical Therapy* 80:974-985, 2000
4. Rosenbaum P.L., Walter S.D., Hanna S.E., **Palisano R.J.**, Russell D.J., Raina P. (2002): Prognosis for Gross Motor Function in Cerebral Palsy: Creation of Motor Development Curves. *Journal of the American Medical Association*, 288(11):1357-1363.
5. **Palisano RJ**, Tieman BL, Walter SD, Rosenbaum PL, Bartlett DJ, Russell D, Hanna SE, Raina P: Effect of Environmental Setting on Mobility Methods of Children with Cerebral Palsy, *Developmental Medicine and Child Neurology*, 45:113-120, 2003
6. **Palisano RJ**: A Collaborative Model of Service Delivery for Children with Movement Disorders: A Framework for Evidence-Based Decision-Making, *Physical Therapy*, 86:1295- 1305, 2006.
7. ***Palisano RJ**, *Copeland WP*, Galuppi BE: Performance of Physical Activities by Adolescents with Cerebral Palsy, *Physical Therapy*, 87:77-87, 2007.
8. Rosenbaum PL, Livingston MH, **Palisano RJ**, Galuppi BA, Russell DJ: Quality of Life and Health-related Quality of Life of Adolescents with Cerebral Palsy. *Developmental Medicine and Child Neurology*, 49:516-521, 2007.
9. ***Palisano RJ**, Rosenbaum P, Bartlett D, *Livingston MH*: Content Validity of the Expanded and Revised Gross Motor Function Classification System. *Developmental Medicine and Child Neurology*, 50:249-253, 2008.
10. Hanna SE, Rosenbaum PL, Bartlett DJ, **Palisano RJ**, Walter SD, Avery L, Russell DJ. Stability and Decline in Gross Motor Function Among Children and Youth with Cerebral Palsy Aged 2 to 21 years. *Developmental Medicine and Child Neurology*, 51: 295-302, 2009
11. ***Palisano RJ**, Hanna SE, Rosenbaum PL, *Tieman B*. Probability of Walking, Wheeled Mobility, and Assisted Mobility for Children and Youth with Cerebral Palsy. *Developmental Medicine and Child Neurology*, 52: 66–71, 2010.

D. Research Support

Ongoing Research Support

Canadian Institutes of Health Research Palisano (Co-PI) 2015-2017
Children Grow Up: Taking a Life-course Approach to Promote Participation and Life Quality for Individuals with Cerebral Palsy from Childhood to Adulthood.

The objective is to create guidelines for a lifecourse health development approach that is essential for promoting developmental capacities for future adult roles and healthy adult living beginning in childhood.

Canadian Institutes of Health Research
Developmental Trajectories of Impairments, Associated Health Conditions, and Participation of Children with Cerebral Palsy

Bartlett (PI)

2012-2017

The objective of this study is to develop reference percentile curves for impairments, associated health conditions, and participation of children with cerebral.

Role: Co-investigator

Patient-Centered Outcomes Research Institute
Developmental Trajectories of Impairments, Health, and Participation of Children with Cerebral Palsy

McCoy (PI)

2013-2016

The objective of this study is to create longitudinal developmental curves for impairments, health conditions, and participation of children with cerebral palsy.

Role: Co-investigator

Ontario Brain Institute
Childhood Cerebral Palsy Integrated Discovery Network "CP-NET". (OBI), 2013-2018

Fehlings (PI)

2013-2018

Role: Co-investigator for Brain-Behaviour Correlates of Health and Well-being in Adolescents and Young Adults with Cerebral Palsy

Completed Research Support

Co-Investigator, Understanding Determinants of Basic Motor Abilities, Self-care, and Play of Young Children with Cerebral Palsy. Canadian Institutes of Health Research, MOP – 81107, 2006-2009

Co-Investigator. Understanding Determinants of Motor Abilities, Self care, and Play of Young Children with Cerebral Palsy. The National Institute on Disability and Rehabilitation Research H133G060254, 2006-2009

Principal Investigator, Activity and Participation of Children with Cerebral Palsy: Multi-Site Clinical Outcomes Study. Shriners Hospitals for Children, COS 9197, 2006-2008

Principal Investigator, Activity and Participation of Children with Cerebral Palsy: Development of a Longitudinal, Multi-Site Clinical Outcomes Study. Shriners Hospitals for Children, COS 9197, 2005

Co-Investigator, Adolescents with Cerebral Palsy: What Happens to Mobility and Self-Care? Canadian Institutes of Health Research, MOP-53258, April 2002-2007

Co-Investigator, Motor Growth Curves in Cerebral Palsy: A Guide for Rehabilitation, National Center for Medical Rehabilitation Research, National Institute for Child Health and Human Development, National Institutes of Health, R01-HD-34957, February 1997-2001

Co-Principal Investigator, Development of Motor Function in Children with Cerebral Palsy: Creation of Motor Growth Curves, Medical Research Council of Canada, MT-12476, January 1996-1998