

CURRICULUM VITAE
Nancy Bloom, MSOT, PT, DPT

PRESENT POSITION: Associate Professor in Physical Therapy and Orthopaedic Surgery
Washington University School of Medicine

EDUCATION:

Degree	Institution	Field	Dates
BA	University of Virginia	Psychology	1972-1976
BS	Washington University	Occupational Therapy	1976-1978
MS	Washington University	Occupational Therapy	1976-1979
BS	Washington University	Physical Therapy	1980-1984
DPT	Washington University	Physical Therapy	1996-2002

ACADEMIC POSITIONS/EMPLOYMENT:

Position	Institution	Dates
<u>Irene Walter Johnson Institute of Rehabilitation</u>	Washington University School of Medicine	
Department of Occupational Therapy Staff Occupational Therapist/Neurology		1979-1980
Senior Occupational Therapist in Neurology		1980-1982
Clinical Specialist in Neurology Rehabilitation		1982-1984
Department of Physical Therapy Clinical Specialist: Posture and Movement		1985-1988
<u>Program in Physical Therapy</u>	Washington University School of Medicine	
Faculty		1988-present

UNIVERSITY POSITIONS/COMMITTEES:

Positions:

Washington University School of Medicine
Academic Rank:

Instructor in Program of Physical Therapy	1988-2005
Assistant Professor in Physical Therapy and Orthopaedic Surgery	2005-2012
Associate Professor in Physical Therapy and Orthopaedic Surgery	2012-present

Committees/Councils/Commissions:

Washington University School of Medicine	
Distinguished Community Service Award nomination committee	2011
Distinguished Educator Selection Committee	2012
Program in Physical Therapy	
Committee of Academic and Professional Evaluation of Students	1988-present
Professional DPT Curriculum Committee	2005-present
Research Advisory Council	2008-present
Continuing Education Committee	2013-present
Marketing Committee	2013-present

LICENSURE INFORMATION/REGISTRATION NUMBER:

Occupational Therapist, Registered (OTR) Registration #407445	1/79-present
Physical Therapist, Licensed (RPT) License #01517	1/85-present

HONORS AND AWARDS:

Missouri Physical Therapy Outstanding Student Award
Missouri Physical Therapy Association
October 1984

The Sister Mary Gray McNally Très Bien Award
Villa Duchesne City House Alumnae Association
April 2012

Outstanding Service Award in Education
Missouri Physical Therapy Association
April 2012

EDITORIAL RESPONSIBILITIES:

Reviewer for Physical Medicine and Rehabilitation Journal

MEMBERSHIP IN SCIENTIFIC/PROFESSIONAL ORGANIZATIONS:

American Physical Therapy Association	1983 -present
Orthopaedic Section	1983 -present
Education Committee (Vice Chair)	2011 –present
Planning Committee for Annual Conference	2012 –present
Committee for Revision of the Clinical Practice Guidelines for Hip Osteoarthritis	2014 -present
Sports Section	2013 -present
Hip Special Interest Group	2013 -present
Education Section	2013 -present

Missouri Physical Therapy Association	1983-present
Academy of Sciences	1990-present
American Occupational Therapy Association	1979-1984

CLINICAL RESPONSIBILITIES:

Position: Faculty Practitioner, Washington University Physical Therapy Clinics

Past Clinical Responsibilities:

Direct care of patients presenting to physical therapy with neurological and musculoskeletal conditions. Prior practice was in occupational therapy caring for inpatients with neurological and neurosurgical conditions.

Current Clinical Responsibilities:

Direct care of patients presenting with surgical and non-surgical sequelae involving the cervical spine, shoulder, lumbar spine, hip, knee, and ankle/foot. A special emphasis has been on pain and movement dysfunction of the hip.

TEACHING RESPONSIBILITIES:

Current Teaching Responsibilities:

Professional Clinical Doctorate (DPT) Curriculum:	Credits
Diagnosis and Evidence Analysis I (PT 601), III (PT650) Course master, lecturer, student advisor Class size: 80	2-3 each
Case Integration Lab I (PT628), II (PT 642) Course master, lecturer, laboratory instructor, student advisor Class size: 80	1 each
Diagnosis and Management of Musculoskeletal Conditions in PT II (PT 614), III (PT 638) Unit Coordinator, lecturer, laboratory instructor Class size: 80	3 each
Human Anatomy (PT 611) Lecturer Class size: 80	5
Kinesiology II (PT 613) Lecturer Class size: 80	5
Post-professional Clinical Doctorate (PPDPT) Curriculum:	
Diagnosis and Management for Musculoskeletal Conditions: Lower Quarter (M22 730) Lecturer, Laboratory instructor Class size: 20-30	3

Independent Study (M22 500) Jayne Scanlan	6
Topics: A review of the Literature on “What is the effect of exercise therapy on pain and disability In the treatment of male and female adults who have hip osteoarthritis?” and a paper on “A comparison of the Janda approach developed by Dr. Vladimir Janda, MD and associates and the MSI approach developed by Dr. Shirley A. Sahrman, PT, PhD, FAPTA and associates in treating musculoskeletal pain”.	
Michael Horan	3
Topic: A review of the literature on “What is the effect of manual therapy, strengthening, and stretching for the treatment of pain in individuals with piriformis syndrome?”	
Capstone Project (M22 820)	3-6 each
Karen Donahue, MSPT, DPT	2005
Topic: “Hip rotation impairments associated with anterior cruciate ligament dysfunction: A summary of the literature and a case report”	
Letitia Barry, PT, MPT, ATC, DPT	2007
Topic: “Anterior groin pain associated with iliopsoas dysfunction: A review of the literature and a case report of the movement system diagnosis and management of a patient with bilateral groin pain”	
Lynnette Khoo-Summer, PT, DPT	2008
Topic: “Clinical presentation of acetabular labral tears: A review of the literature and a case report of the movement system diagnosis and management of a dancer with a labral tear”	
Elizabeth Bishcoff, PT, DPT	2012
Topic: “Lumbar muscle dysfunction associated with low back pain: A literature review” and “Changes in lumbar muscle activation during exercise using biofeedback in low back pain: 2 case reports”	

Past Teaching Responsibilities:

Instruction in professional curriculum (at the BSPT, MSPT, DPT and PPDPT degree levels) associated with examination and intervention for patients with musculoskeletal and neuro muscular impairments; advisement of students; creation of unique learning experiences leading to competence in evidence based practice; reinforcement of diagnosis based approaches to physical therapy that enable effective patient management, and professional collaboration with physicians.

SCIENTIFIC AND PROFESSIONAL PRESENTATIONS:

Lumbar Spine

“Comparisons of Instruments used to Measure Sacral Tilt, Pelvic Tilt, and Lumbar Curve”
Annual Conference and Exposition, American Physical Therapy Association, 1987

“Two Techniques for Measuring Movement of the Lumbar Spine and Pelvis associated with Lower Extremity Movement”

Annual Conference and Exposition, American Physical Therapy Association, 1990

“The effect of active limb movements on symptoms in patients with low back pain”

Annual Conference and Exposition, American Physical Therapy Association, 1999

“Shoulder and lumbar measures in healthy elementary school-aged children”

Annual Conference and Exposition, American Physical Therapy Association, 2001

“Introduction to Movement System Impairments and to Low Back Movement System Impairment Syndromes”

Annual Conference and Exposition, American Physical Therapy Association, 2005

“Hip Rotation Range of Motion in People with and without Low Back Pain who Participate in Rotation-related Sports”

Combined Sections Meeting, American Physical Therapy Association, 2006

“Lumbar Rotation as a Key Factor in Low Back Pain: Clinical and Research Evidence”

Annual Conference and Exposition, American Physical Therapy Association, 2012

Hip and Shoulder Joint

“Movement Impairment Diagnosis of the Shoulder Girdle”

Annual Conference and Exposition, American Physical Therapy Association, 1999

“Groin Pain Caused by Movement System Impairments: A Case Report”

Combined Sections Meeting, American Physical Therapy Association, 2005

“Hip Rotator Muscle Strength Tested with the Hip Flexed Compared to the Hip Extended”

Combined Sections Meeting, American Physical Therapy Association, 2009

“Diagnosis and treatment of two patients with hip pain using the Movement System Impairment classification system”

Combined Sections Meeting, American Physical Therapy Association, 2010

“Iliopsoas Syndrome in Both Young Adults and Individuals after THA or Resurfacing: Diagnosis and Conservative Treatment”

Annual Conference and Exposition, American Physical Therapy Association, 2011

“Postoperative Treatment Protocols for Hip Arthroscopy”

Academic Network Conservational Hip Outcomes Research (ANCHOR)

5th Annual Detroit ANCHOR Meeting, 2012

“Structural and Functional Considerations in the Rehabilitation of Young Active Adults with Intra-articular Hip Disorders”

Combined Sections Meeting, American Physical Therapy Association, 2013

“Standardized Physical Therapy for the Young Adult Hip: Non-surgical and Post-surgical Care”

Course title: “Innovations in the Treatment of Hip and Knee Disorders”

Washington University School of Medicine, Department of Orthopedics, 2013

“The Team Approach to Femoral Acetabular Impingement: Clinical Presentation, Imaging, and Management”
Annual Orthopaedic Section Meeting, 2015

“FAI or Not, You Make the Call”
Annual Orthopaedic Section Meeting, 2015

Education and Evidence Based Practice

“Producing Diagnosticians with Entry-Level Physical Therapy Education: It’s more than Teaching Diagnoses”
Combined Sections Meeting, American Physical Therapy Association, 1997

“Evidence Based Practice: What is it? Where do we get it? How do we use it?”
Combined Sections Meeting, American Physical Therapy Association, 2000

“Tips for Finding, Analyzing, and Applying Evidence to Practice”
Combined Sections Meeting, American Physical Therapy Association, 2009

FUNDED GRANT ACTIVITY:

"Relation of classification scheme for patients with low back pain and analysis of selected quantitated variables"
Co-investigator (2%)
\$59,324
Foundation for Physical Therapy
July 1, 1994 to May 30, 1996

CONTINUING EDUCATION:

Continuing Education Presented:

A variety of presentations at either Occupational or Physical Therapy Annual Conferences on topics related to muscle tone and measurement of self care activities.
1979-1983

"Stretching for Prevention of Shoulder and Knee Injuries" and "Abdominals: Get Rid of the Myth"
Program in Physical Therapy, 1985-1995

“Post-Operative Rehabilitation Following Hip Arthroscopy”
PRORehab, 2006

“How to Answer a Clinical Research Question”
Eastern District Meeting, Missouri Physical Therapy Association, 2008

Presentation and organization of several continuing education courses for physical Therapists: "Diagnosis and Treatment of Movement System Impairment Syndromes."

Courses are offered at three levels: Introductory Level, Advanced Upper Quarter, and Advanced Lower Quarter.

Teach an average of 5 courses per year in the United States, Italy, Spain, Iceland and the United Kingdom from 1988-present.

Continuing Education Attended: (last 6 years)

Academic Network Conservational Hip Outcomes Research (ANCHOR)

5th Annual Detroit ANCHOR Meeting 2012

American Physical Therapy Association

Orthopedic Section Annual Meeting
2013, 2014, 2015

Combined Sections Meeting
2009-2015

Annual Conference
2011, 2012

Program in Physical Therapy Washington University School of Medicine

2014 Movement System Symposium

Steven J. Rose Symposium

2008: "Perspectives on the Management of Back Pain"
Speakers: Paul Hodges, BPhty, MedDr, PhD;
Shirley Sahrmann, PT, PhD, FAPTA; Linda Van Dillen, PT, PhD

2009: "Locomotor Training after Central Nervous System Injury"
Speaker: Edelle Field-Fote, PT, PhD
"Optimizing Patient Outcomes"
Speakers: Edelle Field-Fote, PT, PhD; Catherine Lang, PT, PhD

2010: "Structural and Metabolic Correlates with Muscle Function"
Speakers: Mary Beth Brown, PT, PhD, FACSM, FAPTA; Bret Goodpaster, PhD

2013 "Exercise in the Prevention of Chronic Disease"
Speaker: Steven Blair, PED

2014 "Build it and They Will Come (or NOT!): A Radical Shift in Process, Prototypes and Priorities in Mobility Technology"
Speaker: Cole Galaway, PT, PhD

Alumni Day Seminar

2007-2014: Research Seminars at Washington University
(Series of 6 one-hour bimonthly presentations)

- 2010: "Exercise Interventions to Ameliorate Muscle Impairments"
 Speakers: Mary Beth Brown, PT, PhD, FACSM, FAPTA;
 Lori Tuttle, MSPT; Bret Goodpaster, PhD;
 Dave Sinacore, PT, PhD, FAPTA;
 Ruth Clark, PT, PhD; Michael Mueller, PT, PhD, FAPTA
- 2012: "Pain Mechanisms and Clinical Applications"
 Speakers: Kathleen Sluka, PT, PhD; Steven Z. George, PT, PhD;
 Robert Gereau, PhD; Robert Swarm, MD
- 2013: "Exercise in the Prevention of Chronic Disease"
 Speakers: Ross Brownson, PhD, Amy Eyler, PhD,
 Susan Racette, PhD, Ruth Clark, PhD

PUBLICATIONS:

Peer Reviewed Publications: (Bloom NJ = Woolsey NB)

Articles:

Stith JS, Sahrman SA, Dixon KK, Norton BJ, **Woolsey NB**. Curriculum to Prepare Diagnosticians in Physical Therapy. *Journal of Physical Therapy Education*. 1995;9:46-53.

Cornbleet SL, **Woolsey NB**. Assessment of hamstring muscle length in school-aged children using the sit and reach test and the inclinometer measure of hip joint angle. *Physical Therapy*. 1996;76:850-855.

Van Dillen LR, Sahrman SA, Norton BJ, McDonnell MK, Fleming DA, Caldwell CA, **Woolsey NB**. Reliability of physical examination items used for classification of patients with low back pain. *Physical Therapy*. 1998;78(9):979-988.

Van Dillen LR, Sahrman SA, Norton BJ, McDonnell MK, Fleming DA, Caldwell CA, **Woolsey NB**. The effect of active limb movements on symptoms in patients with low back pain. *Journal of Orthopaedic and Sports Physical Therapy*. 2001;31(8):402-413.

Van Dillen LR, Sahrman SA, Norton BJ, McDonnell MK, Fleming DA, Caldwell CA, **Woolsey NB**. Response to invited commentary. *Journal of Orthopaedic and Sports Physical Therapy*. 2001;31(8):416-418.

Van Dillen LR, Sahrman SA, Norton BJ, Caldwell CA, McDonnell MK, **Bloom NJ**. Movement system impairment-based categories for low back pain: stage 1 validation. *Journal of Orthopaedic and Sports Physical Therapy*. 2003;33(3):126-142.

Van Dillen LR, Sahrman SA, Norton BJ, McDonnell MK, Caldwell CA, **Bloom NJ**. The effect of modifying patient-preferred spinal alignment or movement during symptom testing in patients with low back pain: A preliminary report. *Archives of Physical Medicine and Rehabilitation*. 2003;84(3):313-322.

Van Dillen LR, Sahrman SA, Norton BJ, Caldwell CA, Fleming DA, McDonnell MK, **Bloom NJ**. Trunk Rotation-related impairments in people with low back pain who participated in two

different types of leisure activities. *Journal of Orthopaedic and Sports Physical Therapy*. 2006;36(2):58-71.

Van Dillen LR, **Bloom NJ**, Gombatto SP, Susco TM. Hip rotation range of motion in people with and without low back pain who participate in rotation related sports. *Physical Therapy in Sport*. 9:72-81. doi,10.1016/j.ptsp.2008.01.002.

Bloom N, Cornbleet SL. Hip rotator strength in healthy young adults measured in hip flexion and extension by using a hand-held dynamometer. *Physical Medicine and Rehabilitation*.2014;6(12):1137-1142.
doi:10.1016/j.pmrj.2014.06.002

Harris-Hayes M, Mueller MJ, Sahrman SA, Bloom NJ, Steger-May K, Clohisy JC, Salsich GB. Persons with Chronic Hip Joint Pain Exhibit Reduced Hip Muscle Strength. *JOSPT*.2014;44(11):890-898.

Khoo-Summers L, **Bloom NJ**. Examination and treatment of a professional ballet dancer with a suspected acetabular labral tear: a case report. *Manual Therapy*. 2015;20(4):623-29.
doi:10.1016/j.math.2015.01.015

Abstracts: (Bloom NJ = Woolsey NB)

Woolsey NB, Sahrman SA, Norton BJ. The effect of limb position on triceps tone. *Physical Therapy*.1981;61(5):685.

Woolsey NB, Delitto RS, Sahrman SA. Comparisons of instruments used to measure sacral tilt, pelvic tilt, and lumbar curve. *Physical Therapy*. 1987;67(5):742.

Delitto RS, **Woolsey NB**, Sahrman SA. Comparison of two nonvasive methods for measuring the lumbar spine excursion which occurs in forward bending. *Physical Therapy*.1987;67(5):743

Reisman MA, Sahrman SA, **Woolsey NB**. Interrater and intrarater reliability of hip height measurement tool. *Physical Therapy*. 1987;67(5):744-745.

Sahrman SA, Reisman MR, **Woolsey NB**. Quantitative measurement of bilateral hip level and hip drop. *Physical Therapy*.1987;67(5):746.

Woolsey NB, Norton BJ, Sahrman SA. Two techniques for measuring movement of the lumbar spine and pelvis associated with lower extremity movement. Abstracts of Platform and Poster Presentations, 65th Annual Conference of the APTA. June 24-28, 1990:78. Copies can be obtained from APTA Office Services, 111 N. Fairfax St. Alexandria, VA 22314.

Dixon KK, Tenhula J, Sahrman SA, Stith J, **Woolsey NB**. Preparing diagnosticians in a master's degree entry level curriculum. Abstracts of Platform and Poster Presentations, 65th Annual Conference of the APTA. June 24-28, 1990:9. Copies can be obtained from APTA Office Services, 111 N. Fairfax St. Alexandria, VA 22314.

Cornbleet SL, **Woolsey NB**. Critical analysis of the sit and reach test. *Physical Therapy*. 1991;71(6)suppl:S71.

Woolsey NB, Sahrman SA, Dixon KK. A diagnostic classification of impingement syndromes at the hip joint as taught in an entry-level curriculum. *Physical Therapy*. 1991.

Woolsey NB, Cornbleet SL. Hamstring flexibility during the sit and reach test." *Physical Therapy*.1992;72(6)suppl:S33.

Van Dillen LR, Sahrman SA Norton BJ, Caldwell CA, McDonnell MK, Fleming DA, **Woolsey NB**. Improving the reliability of history and physical examination items used for classification of patients with low back pain. In Proceedings of the 12th International Congress of the World Confederation for Physical Therapy, p 248, June 25-30, 1995.

Stith JS, Sahrman SA, Dixon KK, Norton BJ, **Woolsey NB**. Curriculum prepares diagnosticians in physical therapy. *Journal of Physical Therapy Education*. 1995;9:46-53.

Van Dillen L, Norton BJ, Sahrman SA, McDonnell MK, Caldwell CA, Fleming DA, **Woolsey NB**. Inter-Rater reliability of a clinical examination used for classification of patients with low back pain. *Physical Therapy*. 1996;76(5):S38.

Van Dillen LR, Sahrman SA, Norton BJ, Strube MJ, Caldwell CA, McDonnell MK, Fleming DA, **Woolsey NB**. Construct validity of a clinical classification system for low back pain patients. *Physical Therapy*.1998;78(5):S27-28.

Van Dillen LR, Sahrman SA, Norton BJ, Caldwell CA, Fleming DA, McDonnell MK, **Woolsey NB**. Rotation-related impairments in-patients with low back pain who perform symmetric versus asymmetric activities. *Journal of Orthopaedic and Sports Physical Therapy*. 2002;32:A19.

Cornbleet SL, **Bloom NJ**. Hip rotator muscle strength tested with the hip flexed compared to the hip extended. *Journal of Orthopaedic and Sports Physical Therapy*. 2009;39(1);A54.

Smith C, **Bloom N**, Sahrman SA, Harris-Hayes M. Diagnosis and treatment of two patients with hip pain using the Movement System Impairment classification system. *Journal of Orthopaedic and Sports Physical Therapy*. 2010;40(1);A64.

Cornbleet SL, **Bloom NB**. Hip rotator strength in hip flexion and extension: a study of healthy individuals and those with hip pain. *Journal of Orthopaedic and Sports Physical Therapy*. 2013;43(1):A106.

Czuppon S, Prather H, Hunt DM, **Bloom NJ**, Clohisy JC, Harris-Hayes M. Are there sex-dependent differences in hip range of motion and impingement testing in asymptomatic college freshman athletes? *Journal of Orthopaedic and Sports Physical Therapy*. Accepted poster presentation. In press

Uding AR, **Bloom NJ**, Commean PK, Hillen TJ, Patterson JD, Harris-Hayes M. Clinical tests to determine femoral version category in people with chronic hip joint pain and asymptomatic controls. *Journal of Orthopaedic and Sports Physical Therapy*. Accepted platform presentation. In press

Book Chapters:

Sahrman SA and Associates; Movement System Impairment Syndromes of the Extremities, Cervical, and Thoracic Spines. 1st edition. St. Louis, MO; Elsevier Mosby: 2010. Co-author of Chapter 1: Update of Concepts underlying Movement System Syndromes. (Co-author is Shirley A, Sahrman, PT, PhD, FAPTA)

Reider B, Davies G, Provencher MT. Orthopaedic Rehabilitation of the Athlete: Getting Back in the Game. 1st edition. St. Louis, MO; Elsevier: 2015.

Co-author of chapter: Femoroacetabular Impingement: Post Surgical Rehabilitation
(Co-authors are John C. Clohisy, MD and Marcie Harris Hayes, PT, DPT)

Clinical Summary in PTNow:

Harris-Hayes M, Enseki K, **Bloom N.** Femoroacetabular Impingement-Nonsurgical Management.
In press.

OTHER PROFESSIONAL ACTIVITIES:

Mini Medical School
Washington University School of Medicine
Laboratory instructor
2000-2013

Volunteer for a variety of Health Fairs including Washington University School of
Medicine Health Happenings, Career Days and presentations at the Saint Louis Science
Center

COMMUNITY SERVICE:

Community School
President of Parent Association 1993-1994
Member of Board of Trustees 1994-2000
Chaired Development, Strategic Planning and Education Committees
Served on the Executive Committee for 4 years

Villa Duchesne/City House Alumnae Association

Villa Duchesne and Oak Hill School
Member of Board of Trustees
(Executive Committee, Chair of Advancement, Chair of Committee on Trustees)
2005-2011

Member of Committee on Trustees 2012
Chair of Nominating 2012

President of Villa Duchesne/City House Alumnae Association 2007-2009
Member of Board of 2000-present

St. Louis Track Club
Member and volunteer of 1997-present