

CURRICULUM VITAE

Date: June 2023

Name: Nancy Bloom, MSOT, PT, DPT

Contact Information

Address, Telephone, and Email:

- Office
 - Main office: 314-286-1400
 - Voice mail: 314-286-1434
 - FAX: 314-286-1410
 - Program in Physical Therapy
Washington University School of Medicine
Campus Box 8502
4444 Forest Park Boulevard, Suite 1101
St. Louis, Missouri 63108
- E-mail:
 - bloomn@wustl.edu

Present Position

2017 – Present: Professor in Physical Therapy and Orthopaedic Surgery
Washington University School of Medicine
Responsibilities include teaching, clinical practice, and continuing education.

Education

- Undergraduate
 - BA in Psychology, University of Virginia, Charlottesville, VA, USA
 - BS in Occupational Therapy, Washington University, Saint Louis, MO, USA
 - BS in Physical Therapy, Washington University, Saint Louis, MO, USA
- Graduate
 - MS in Occupational Therapy, Washington University, Saint Louis, MO, USA
 - DPT in Physical Therapy, Washington University, Saint Louis, MO, USA

Academic Positions/Employment

1979 – 1980: Irene Walther Johnson Institute of Rehabilitation
Washington University School of Medicine
Department of Occupational Therapy
Staff Occupational Therapist/Neurology

1980 – 1982: Irene Walther Johnson Institute of Rehabilitation
Washington University School of Medicine
Department of Occupational Therapy
Senior Occupational Therapist in Neurology

- 1982 – 1984: Irene Walther Johnson Institute of Rehabilitation
Washington University School of Medicine
Department of Physical Therapy
Clinical Specialist in Neurology Rehabilitation
- 1985 – 1988: Irene Walther Johnson Institute of Rehabilitation
Washington University School of Medicine
Department of Physical Therapy
Clinical Specialist: Posture and Movement
- 1988 – 2005: Instructor in Program of Physical Therapy
Washington University School of Medicine
- 2005 – 2012: Assistant Professor in Physical Therapy and Orthopaedic Surgery
Washington University School of Medicine
- 2012 – 2017: Associate Professor in Physical Therapy and Orthopaedic Surgery
Washington University School of Medicine

Clinical Title and Responsibilities

Position: Faculty Mentor, Washington University Physical Therapy Clinic

Current Clinical Responsibilities:

Provide mentorship to clinicians with a special emphasis on the diagnosis and treatment of pain and movement dysfunction in the hip and lumbar spine.

Past 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 was placed on pain and movement dysfunction of the hip.

Prior practice was in occupational therapy caring for inpatients with neurological and neurosurgical conditions.

Teaching Responsibilities

Current Teaching Responsibilities:

Professional Clinical Doctorate (DPT) Curriculum

Credits

Year 1:

Coaching (Fall/Spring)
Group size: 5

Phase 1: Learning as a Professional
Module 1: Learning, Health and Equity
Team member, lecturer
Module 2: Professions and Movement
Team Lead, lecturer, lab instructor
Class size: 97

Phase 2: Promoting Health through Movement
Module 4B: Movement and Precision Health (16 weeks/Spring)
Lecturer (content related to anatomy and kinesiology of the hip and integration sessions focused on the lower quarter), lab instructor, clinical education small group advisor
Class size: 97

Year 2:

Coaching (Fall/Spring)
Group size: 5

Phase 3: Optimizing Movement
Module 5: Prevention, Diagnosis and Management of Movement-Related Problems (16 weeks/Fall)
Co-coordinate content for assessment and didactic information related to the lumbar spine, hip, knee, and foot/ankle, Lecturer (primarily content related to the lumbar spine and hip joint), lab instructor (upper quarter and lower quarter sessions), tester for performance assessments for learning (PAFL) and performance assessments of learning (PAOL), clinical education small group advisor
Class size: 94

Module 6: Prevention, Diagnosis and Management of Complex Movement-Related Problems (16 weeks/Spring)
Lab instructor, tester for performance assessments for learning (PAFL) and performance assessments of learning (PAOL)
Class size: 94

Year 3:

Diagnosis and Evidence Analysis III (PT650), (16 weeks/Spring) 3
Course master, lecturer, student advisor
Class size: 84

Past teaching responsibilities:

Professional Clinical Doctorate Curriculum:

General overview:
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.

Diagnosis and Evidence Analysis I (PT 601), III (PT650) 2-3 each
Course master, lecturer, student advisor
Class size: 88

Diagnosis and Management of Musculoskeletal Conditions in
PT 1 (PT 614), PT II (PT 624), III (PT 638) 3 each
Unit Coordinator, lecturer, laboratory instructor
Class size: 88

Human Anatomy (PT 611) 5
Lecturer
Class size: 88

Kinesiology II (PT 613) 5
Lecturer
Class size: 88

Essential Clinical Skills II (PT 627) 3
Laboratory instructor
Class size: 88

Case Integration Lab I (PT628) and III (PT 654) 1 each
Lecturer
Class size: 88

Case Integration Lab II (PT 642), 1
Course assistant, lecturer, laboratory instructor
Class size: 88

Post-professional Clinical Doctorate (PPDPT) Curriculum

Diagnosis and Management for Musculoskeletal Conditions 3
Lower Quarter (M22 730)
Lecturer, Laboratory instructor
Class size: 20-30

Independent Study (M22 500)

Jayne Scanlan - 2002 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 - 2002 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"

University Positions/Committees

Program in Physical Therapy

Committee of Academic and Professional Evaluation of Students	1988 – 2021
Research Advisory Council	2008 - present
Continuing Education Committee	2013 - present
Mentoring Task Force	2015 - present
Pain Thread: thread leader for curriculum	2020 - present
Evidence Thread: member of thread team	2020 - present
Practice Based Learning and Improvement: Domain lead	2020 - present
Evidence Movement System Task Force	2021- 2022
Pain Science Task Force	2016 – 2019
Architecture Team for Curriculum Renewal	2019 - 2020
Movement System Work Group for Curriculum Renewal	2019 - 2021
Planning Committee for Alumnae Reunion 2021	2019 – 2021
Design Team for Curriculum Renewal	2019 – 2021
Professional DPT Curriculum Committee	2005 - 2021
Chair Faculty Search Committee for Clinical Faculty Positions	2019
Competency Attainment Committee	2021 – present
Assessment Committee for Year 1	2021 - present

Washington University School of Medicine

Distinguished Community Service Award Nomination Committee	2011
Distinguished Educator Selection Committee	2012

Medical Licensure and Certification

1/79 - present: Occupational Therapy Registration #407445, Missouri, Inactive

1/85 - present: Physical Therapy License #01517, Missouri, Active

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

Henry O. & Florence P. Kendall Practice Award
American Physical Therapy Association
June 2016

Editorial Responsibilities

Reviewer for *Physical Medicine and Rehabilitation Journal*

2014-present

National or International Panels, Committees

2012 – 2022	Planning Committee for Annual Orthopaedic Meeting (member)
2018	American Physical Therapy Association Task force for Movement System Diagnosis
2018	International Work Group for Hip Pain Consensus Meeting

Community Service Contributions

School of Medicine and other academic units

- 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 four years

- Villa Duchesne/City House Alumnae Association
 - President of Villa Duchesne/City House Alumnae Association 2007-2009
 - Member of Board of 2000-2016

- Villa Duchesne and Oak Hill School
 - Member of Board of Trustees 2005-2012
 - Various roles including: Executive Committee, Chair of Advancement, Chair of Committee on Trustees, Chair of Nominating Committee

- Washington University School of Medicine
 - Mini Medical School, Laboratory Instructor 2000-present
 - Volunteer (variety of years from 1995-present)
 - Health Fairs
 - Career Days
 - Presentations at the Saint Louis Science Center or high schools

Professional Societies and Organizations

- American Occupational Therapy Association 1979-1984

- Missouri Physical Therapy Association 1983-present

- American Physical Therapy Association 1983-present
 - Academy of Orthopaedic Physical Therapy (AOPT)
 - American Academy of Sports Physical Therapy
 - Academy of Education

- Leadership positions
 - Elected Director for AOPT with 3 year term starting in February, 2023
 - Chair of Education Committee for AOPT
The Chair leads the review and acceptance for all orthopaedic programming at the National Combined Sections Meeting. The chair facilitates the organization and implementation of the Annual Orthopaedic Meeting, a continuing education course. (2016-2022)
 - Ex-officio Member of Board of Directors for the AOPT (2016-2022)
 - Serve on Advisory Panel of AOPT (2016–2022)

Invited Professorships and Lectureships

Lumbar Spine

- 1987 “Comparisons of Instruments used to Measure Sacral Tilt, Pelvic Tilt, and Lumbar Curve”
Annual Conference and Exposition, American Physical Therapy Association
- 1990 “Two Techniques for Measuring Movement of the Lumbar Spine and Pelvis associated with Lower Extremity Movement”
Annual Conference and Exposition, American Physical Therapy Association
- 1999 “The effect of active limb movements on symptoms in patients with low back pain”
Annual Conference and Exposition, American Physical Therapy Association
- 2001 “Shoulder and lumbar measures in healthy elementary school-aged children”
Annual Conference and Exposition, American Physical Therapy Association
- 2005 “Introduction to Movement System Impairments and to Low Back Movement System Impairment Syndromes”
Annual Conference and Exposition, American Physical Therapy Association
- 2006 “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
- 2012 “Lumbar Rotation as a Key Factor in Low Back Pain: Clinical and Research Evidence”
Annual Conference and Exposition, American Physical Therapy Association

Hip

- 2005 “Groin Pain Caused by Movement System Impairments: A Case Report”
Combined Sections Meeting, American Physical Therapy Association
- 2009 “Hip Rotator Muscle Strength Tested with the Hip Flexed Compared to the Hip Extended”
Combined Sections Meeting, American Physical Therapy Association

- 2010 “Diagnosis and treatment of two patients with hip pain using the Movement System Impairment classification system”
Combined Sections Meeting, American Physical Therapy Association
- 2011 “Iliopsoas Syndrome in Both Young Adults and Individuals after THA or Resurfacing: Diagnosis and Conservative Treatment”
Annual Conference and Exposition, American Physical Therapy Association
- 2012 “Postoperative Treatment Protocols for Hip Arthroscopy”
Academic Network Conservational Hip Outcomes Research (ANCHOR)
5th Annual Detroit ANCHOR Meeting
- 2013 “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 Orthopaedics
- 2015 “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
- 2018 “Intra-articular, Prearthritic, Hip Disorders and the Movement System”
Annual Orthopaedic Section Meeting
- 2018 “Hip Instability: What is it and How Do I Manage it?”
Webinar for American Physical Therapy Learning Center
- 2018 “Strategies for Identifying and Managing Pain Problems in the Hip and Thigh”
Oasis Organization at the Center of Clayton in St. Louis, MO
- 2018 “The Team Approach to FAI: Clinical Presentation, Imaging, and Management”
Continuing Education at Memorial Hospital in Belleville, Illinois
- 2022 “Structural and Muscular Factors Contributing to Femoral Syndromes and Considerations for FAI and DDH”
Performance in Motion Team Meeting
- 2023 “Hip Dysplasia: It's Not Just a Shallow Socket”
Combined Sections Meeting, American Physical Therapy Association
Also presented with Marcie Harris Hayes, Michael Harris, and Cheryl Smith

Other Musculoskeletal Regions

- 1999 “Movement Impairment Diagnosis of the Shoulder Girdle”
Annual Conference and Exposition, American Physical Therapy Association

- 2018 “Do You See a Pattern: Link the Movement Faults Across Your Exam”
Also presented with Suzy Cornbleet, Cheryl Caldwell, and Renee Ivens
NEXT Conference, Annual American Physical Therapy Conference
- 2019 “The Movement System Across the Lifespan”
Also presented with Cindy Miles and Kathleen Mangione
NEXT Conference, Annual American Physical Therapy Conference
- 2019 “The Hallmark of a Movement System Expert: Pattern Recognition”
Missouri Physical Therapy State Chapter Meeting
Also presented with Cheryl Caldwell, Suzy Cornbleet, and Renee Ivens
- 2023 “Person-specific care for Individuals with foot and ankle dysfunction: A Roadmap beyond localized tissue damage”
Combined Sections Meeting, American Physical Therapy Association
Also presented with Mary Hastings, Ruth Chimenti, and Jeff Houck

Education and Evidence Based Practice

- 1997 “Producing Diagnosticians with Entry-Level Physical Therapy Education: It’s more than Teaching Diagnoses”
Combined Sections Meeting, American Physical Therapy Association
- 2000 “Evidence Based Practice: What is it? Where do we get it? How do we use it?”
Combined Sections Meeting, American Physical Therapy Association
- 2009 “Tips for Finding, Analyzing, and Applying Evidence to Practice”
Combined Sections Meeting, American Physical Therapy Association

Other

- 1979-1983 A variety of presentations at either Occupational or Physical Therapy Annual Conferences on topics related to muscle tone and measurement of self-care activities
- 1985-present Presentation and organization of over 80 continuing education courses for physical Therapists: "Diagnosis and Treatment of Movement System Impairment Syndromes." Courses are focused on either the upper quarter or lower quarter. National: Teach an average of 3 courses per year in the United States
- 1988-present International: Teach an average of 1-2 courses per year in other countries including Canada, Italy, Spain, Iceland, Japan and the United Kingdom from 1988-2020. Virtual courses 2020 - present

Organize and participate in continuing education, clinical shadowing experiences, and academic discussions for a group of 10 to 12 Italian physiotherapists who visit Washington University annually.
- 1985-1995 "Stretching for Prevention of Shoulder and Knee Injuries and Abdominals: Get Rid of the Myth" Program in Physical Therapy
- 2006 “Post-Operative Rehabilitation Following Hip Arthroscopy”
PRO-Rehab, St. Louis, MO

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

Research

"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, nongovernmental

July 1, 1994 to May 30, 1996

Bibliography

Peer Reviewed Publications: (Bloom NJ = Woolsey NB)

Articles:

1. 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.
2. 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.
3. 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.
4. 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.
5. 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.
6. 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.
7. 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.
8. 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.
9. 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*. 2008;9:72-81. doi,10.1016/j.ptsp.2008.01.002.

10. **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.
11. 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.
12. Czuppon S, Prather H, Hunt DM, Steger-May K, **Bloom NJ**, Clohisy JC, Larsen R, Harris-Hayes M. Gender-Dependent Differences in Hip Range of Motion and Impingement Testing in Asymptomatic College Freshman Athletes. *PM&R*.2016;9(7):660-667. doi:10.1016/j.pmrj.2016.10.022.
13. Cibulka MT, **Bloom NJ**, Enseki KR, MacDonald CW, Woehrle J, McDonough CM. Hip Pain and Mobility Deficits – Hip Osteoarthritis: Revision 2016. Clinical Practice Guidelines Linked to the International Classification of Functioning, Disability, and Health from the Orthopaedic Section of the American Physical Therapy Association. *JOSPT*. 2017;47(6):A1-A37. doi:10.2519/jospt.2017.0301.
14. Uding A, **Bloom NJ**, Commean PK, Hillen TJ, Patterson JD, Clohisy JC, Harris-Hayes M. Clinical Tests to Determine Femoral Version Category in People with Chronic Hip Joint Pain and Asymptomatic Controls. *Musculoskeletal Science & Practice*. 2019;39:115-122.
15. Kemp J, Risberg MA, Mosler A, Harris-Hayes M, Serner A, Moksnes H, Bloom NJ et al. Physiotherapist-led treatment for young to middle-aged active adults with hip-related pain: consensus recommendations from the International Hip-related Pain Research Network, *BrJSportsMed*. 2019;0:1-8. doi: 10.1136/bjsports.2019.101458
16. Reiman MP, Agricola R, Kemp JL, Heerey JJ, Weir A, van Klij P, Kassarian A, Mosler AB, Ageberg E, Hölmich P, Warholm KM, Griffin D, Mayes S, Khan KM, Crossley KM, Bizzini M, **Bloom N** et al. Consensus recommendations on the classification, definition and diagnostic criteria of hip-related pain in young and middle-aged active adults from the International Hip-related Pain Research Network, Zurich 2018. *Br J Sports Med*. 2020 Jun;54(11):631-641.
17. Mosler AB, Kemp J, King M, Lawrenson PR, Semciw A, Freke M, Jones DM, Casartelli NC, Wörner T, Ishøi L, Ageberg E, Diamond LE, Hunt MA, Di Stasi S, Reiman MP, Drew M, Friedman D, Thorborg K, Leunig M, Bizzini M, Khan KM, Crossley KM, Agricola R, **Bloom N** et al. Standardised measurement of physical capacity in young and middle-aged active adults with hip-related pain: recommendations from the first International Hip-related Pain Research Network (IHiPRN) meeting, Zurich, 2018, *Br J Sports Med*. 2020 Jun;54(12):702-710.
18. Impellizzeri FM, Jones DM, Griffin D, Harris-Hayes M, Thorborg K, Crossley KM, Reiman MP, Scholes MJ, Ageberg E, Agricola R, Bizzini M, **Bloom N**, Casartelli NC, Diamond LE, Dijkstra HP, Stasi SD, Drew M, Friedman DJ, Freke M, Gojanovic B, et al. Patient-reported outcome measures for hip-related pain: A review of the available evidence and a consensus statement from the International Hip-related Pain Research Network, Zurich 2018, *Br J Sports Med*, 2020 July 54(14):848-857.

19. Reiman MP, Agricola, R, Kemp JL, Heerey JJ, Weir A, Van Klij P, Kassarian A, Mosler AB, Ageberg E, Hölmich P, Warholm KM, Griffin D, Mayes S, Khan KM, Crossley KM, Bizzini M, **Bloom N**, Casartelli NC, Diamond LE, Di Stasi, S. et al. Infographic. Consensus recommendations on the classification, definition and diagnostic criteria of hip-related pain in young and middle-aged active adults from the International Hip-related Pain Research Network, Zurich 2018, *Br J Sports Med*, 2021 Jan;55(2):115-117.
20. Enseki RE, **Bloom NJ**, Harris-Hayes M, Cibulka MT, Disantis, A, Di Stasi S, Malloy P, Clohisy JC, Martin RL. Hip pain and movement dysfunction associated with nonarthritic hip joint pain: a revision. *JOSPT*, 2023;53(7):CPG1-CPG70. doi:10.2519/jospt.2023.0302
21. Kuhn AW, Clohisy JC, Stockton SC, Cheng AL, Hillen TJ, Pascual-Garrido C, Tatman J, **Bloom N**, Shoenecker PL, Nepple JJ. Hip Preservation Surgery: A Team-Based Approach. *JBSJ* (accepted in June 2023)

Case Report:

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

Special Report:

1. **JBJS-JOSPT Special Report: It Takes a Team**. March 2013
Collaborative cases from a variety of centers of orthopaedic excellence including Washington University (St. Louis) School of Medicine
2. **Nancy Bloom, PT, DPT**, John Clohisy, MD. *The prearthritic hip: collaborating clinicians sidestep surgery with movement system diagnosis*.

Abstracts: (Bloom NJ = Woolsey NB)

1. ***Woolsey NB**, Sahrman SA, Norton BJ. The effect of limb position on triceps tone. *Physical Therapy*.1981;61(5):685.
2. ***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.
3. Delitto RS, **Woolsey NB**, Sahrman SA. Comparison of two noninvasive methods for measuring the lumbar spine excursion which occurs in forward bending. *Physical Therapy*.1987;67(5):743
4. Reisman MA, Sahrman SA, **Woolsey NB**. Interrater and intrarater reliability of hip height measurement tool. *Physical Therapy*. 1987;67(5):744-745.
5. Sahrman SA, Reisman MR, **Woolsey NB**. Quantitative measurement of bilateral hip level and hip drop. *Physical Therapy*.1987;67(5):746.
6. ***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.

7. 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.
8. Cornbleet SL, **Woolsey NB**. Critical analysis of the sit and reach test. *Physical Therapy*. 1991;71(6)suppl:S71.
9. ***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.
10. ***Woolsey NB**, Cornbleet SL. Hamstring flexibility during the sit and reach test." *Physical Therapy*.1992;72(6)suppl:S33.
11. 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.
12. 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.
13. 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.
14. 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.
15. 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.
16. 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.
17. 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.
18. 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.
19. 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*. 2015;45(1):A157.

20. 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*. 2015;45(1):A27.

Book Chapters:

1. 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)
2. 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 4: Hip and Thigh “Postoperative Rehabilitation after Femoroacetabular Treatment, Labral Repair, and Labral Debridement” (Co-authors are John C. Clohisey, MD and Marcie Harris Hayes, PT, DPT)

Clinical Summary for American Physical Therapy Association:

1. Harris-Hayes M, Enseki K, Bloom N. Femoroacetabular Impingement-Nonsurgical Management. American Physical Therapy Association.2017
<https://www.apta.org/patient-care/evidence-based-practice-resources/clinical-summaries/femoroacetabular-impingement-nonsurgical-management>