

CURRICULUM VITAE

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Name: Renee A. Ivens, PT, DPT

Contact Information

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Present Position

2013- present: Associate Professor
Program in Physical Therapy and Orthopaedic Surgery
Washington University School of Medicine
St Louis, Missouri

Education

1984 BS Physical Therapy, Maryville University, St Louis, Missouri

1992 MHS Health Science, Physical Therapy, Washington University, St Louis, Missouri

2006 DPT Physical Therapy, Washington University, St Louis, Missouri

Professional Experience:

1984-1985 Physical Therapist
Metropolitan Physical Therapy
St. Louis, Missouri

1985- 1992 Physical Therapist
Irene Walter Johnson Rehabilitation
Washington University School of Medicine
St Louis, Missouri

1986-2002 Lecturer

	Program in Physical Therapy Washington University School of Medicine St Louis, Missouri
1987-88, 1989-90	Clinical Instructor St Louis University Department of Physical Therapy
1992-1996	Orthopedic Clinical Specialist Barnes-Jewish Hospital St Louis, Missouri
1996-2000	Senior Physical Therapist Barnes-Jewish Hospital St Louis, Missouri
2001-2002	Lead Physical Therapist The Rehabilitation Institute of St Louis St Louis, Missouri
2002-2007	Instructor Program in Physical Therapy Washington University School of Medicine St Louis, Missouri
2007-2013	Assistant Professor Program in Physical Therapy Washington University School of Medicine St Louis, Missouri

Clinical Title and Responsibilities

Position: Faculty Mentor, Washington University Physical Therapy Clinic

Current Clinical Responsibilities:

Provide consultation and mentorship to clinical practitioners for patients with a variety of neuro-musculoskeletal problems; specialized focus on spine, shoulder and peripheral nerve injuries.

Past Clinical Responsibilities:

Direct care of patients presenting with neuro-musculoskeletal conditions involving the spine, shoulder, hip, and knee. A special emphasis was placed on pain and movement dysfunction of the shoulder and neck.

Teaching Title and Responsibilities

Teaching Responsibilities

Professional Clinical Doctorate (DPT) Curriculum (WUSM)

Year 1 Competency Based Curriculum:

Phase 2: Promoting Health through Movement

Module 4A: Movement and Precision Health

Lecturer

Class size: 87-97

Module 4B: Movement and Precision Health

Lecturer/Lab Assistant

Class size: 87-97

Year 2 Competency Based Curriculum:

Phase 3: Optimizing Movement

Module 5: Prevention, Diagnosis and Management of Movement Problems

Module team: design, plan and implement musculoskeletal content

Lecturer/Lab Assistant

Class size: 84-97

Module 6: Prevention, Diagnosis and Management of Complex Movement Problems

Lecturer/Lab Assistant

Class size: 84-97

Year 3 Competency Based Curriculum:

Coaching

Phase 4: Practicing as a Professional

Module 7: Practice and Movement, Module 8: Practice, Health and Equity

Lab Assistant/Project Advisor

Group size: 1-6

Previous Teaching Responsibilities

Clinical Fellowship in Diagnosis and Management of Movement Impairment Syndromes

Mentorship for on-site fellow and distance fellows on examination and treatment for a wide range of orthopaedic patients. 2011-2021

Professional Clinical Doctorate (DPT) Curriculum (WUSM)

Anatomy (PT 611)

Lecturer 2015-2021
 Class Size: 84-93
 Credit hours: 5

Kinesiology II (PT 613)

Coursemaster: 2010-2021
 Unit coordinator/Lecturer: 2008-2021
 Class Size: 76-93
 Credit hours: 5

Diagnosis & Management of Musculoskeletal Conditions I (PT 614)

Lecture/Lab Assistant: 2002-2021
 Class Size: 76-93
 Credit hours: 3

Orthopaedic Medicine (PT 623)

Coursemaster: 2007-2021
 Class Size: 76-94
 Credit hours: 2

Diagnosis & Management of Musculoskeletal Conditions II (PT 624)

Unit co-coordinator/Lecturer/Lab Assistant: 2002-2021
 Class Size: 76-94
 Credit hours: 3

Essential Clinical Skills II (PT 627)

Lecturer: 2010-2021
 Lab Assistant: 2002-2021
 Class Size: 76-94
 Credit hours: 3

Case Integration Lab I (PT 628)

Small Group Advisor 2002-2021
 Group Size: 6-10
 Lecturer: 2002-2021
 Class Size: 76-88
 Credit hour: 1

Diagnosis & Management of Musculoskeletal Conditions III (PT 638)

Lecturer/Lab Assistant: 2002-2022
 Unit co-coordinator: 2019-2022
 Assistant Coursemaster: 2009

Class Size: 76-94
 Credit hours: 3

Diagnosis and Evidence Analysis in PT Practice III (PT 650)

Advisor: 2002-2023
 Students: 1-3 students
 Credit hours: 3

Professional Issues and Skill Development II (PT 615) & III (PT 655)

Examiner: 2015- 2023
 Students: 4-6 students

Case Integration III (PT 654)

Lecturer/Lab Assistant: 2007- 2023
 Advisor: 2002-2021
 Class size: 76-93 students
 Credit hours: 3

Post-Professional Clinical Doctorate (PP DPT) Curriculum

Diagnosis & Management for Musculoskeletal Conditions Upper Quarter (M22-740)

Lecturer/Lab Assistant
 Class size: 10-20 students
 Credit hours: 3

Diagnosis & Management for Musculoskeletal Conditions Lower Quarter (M22-750)

Lab Assistant
 Class size: 10-20 students
 Credit hours: 3

Women's Health Residency

Lecture/discussion: Movement System Diagnoses for the Shoulder Applied to the Patient with Breast Cancer, 2011-2015

- Instruction in professional curriculum in entry level Masters of Science in Physical Therapy and Post Professional Masters relating to examination and intervention for patients with musculoskeletal impairments, management of orthopaedic conditions, advisement of students and coordination of student elective coursework. 1986-2002

Professional Clinical Doctorate Occupational Therapy (OTD) Curriculum (WUSM)

Medical and Mental Health Conditions (OT 5223)

Topic: Orthopaedic Conditions and Musculoskeletal Disorders
 Lecturer: 2008-2011

Trainee/Mentee/Sponsorship Record:

Advisor for PPDPT:

Fall 2010	Capstone Project (M22 820), 6 credit hours Becky Miller “Middle, Older, and Advanced Age Women’s Response to High Intensity Resistance Training: A Review of the Literature and Comparison of Three Case Studies”
Spring 2011	Independent Study (M22 500), 3 credit hours Matt Driskill “Physical Therapy for Patients with Venous or Neurogenic Thoracic Outlet Syndrome”
Spring/Summer 2011	Capstone Project (M22 820), 3 credit hours Erica Herron “Axillary Web Syndrome: Treatment options and outcomes for patients with breast cancer”
Spring 2013	Capstone Project (M22 820), 6 credit hours Jennifer Long “Operative and non-operative treatment methods and related outcomes for anterior shoulder instability in young and middle-aged adults”
Fall 2013	Capstone Project (M22 820), 6 credit hours Scott Gregory “Associating scapular kinematics with impingement at the glenohumeral joint”
Spring 2014	Capstone Project (M22 820), 3 credit hours Ben Close “The Contribution of Scapular Alignment & Movement Control to Neck Pain”

Development of Teaching Materials for Professional DPT Curriculum

Videoclips

Materials used by DPT students to learn skills and clinical decision making used during examination, diagnosis, and treatment. Topics include: joint mobilization of the shoulder, special tests of the shoulder and thoracic spine.

Development of patient cases for learning and assessment, focused on musculoskeletal problems of the spine, shoulder and elbow.

University, School of Medicine and Hospital Appointments and Committees

COMMITTEES:

Program in Physical Therapy, Washington University School of Medicine

1998-2009	Admissions Committee
2002-2008	Clinical Practice Advisory Committee
2003-2004	Program Innovation Council
2004-2006	Planning Committee for Orthopaedic Clinical Fellowship in Diagnosis and Management of Movement Impairment Syndromes
2007-2010	Committee on Academic Evaluation of Students (CAES)
2008-2011	International Service Committee
2010-2023	Committee on Academic and Professional Evaluation of Students (CAPES)
2011-present	Professional Program Curriculum Committee
2015, 2017	Clinic Associate Search Committee
2016- 2020	Fellowship Curriculum Task Force
2018-2019	Pain Task Force
2018-2020	Technology Curriculum Renewal Consideration Team
2019-2020	Clinical Faculty Search Committee: 2 faculty positions
2021	Clinic Associate interview team
2021- 2022	Module 5 Build Team, Consultant for Module 4 Build Team, Generation and Control of Movement Thread team member
2023- present	Module 5 Team, Generation and Control of Movement Thread team member

Medical Licensure and Certification

Missouri Board of Registration for the Healing Arts
 Registration Number: 01496 1984-present

Credentialed Clinical Instructor 2009-present
 American Physical Therapy Association (APTA)

Honors and Awards

2013 Helen Mae Bradley Award, Maryville University, St Louis, MO

Editorial Responsibilities

Reviewer:

Manual Therapy 2011-present

Journal of Shoulder and Elbow Surgery 2015-present

Professional Societies and Organizations

American Physical Therapy Association 1983-present

○ Orthopaedic Section (APTA) 1993-present

○ Oncology Section 2009-2011

Missouri Physical Therapy Association 1983-present

American Society of Shoulder and Elbow Therapists 2010-present

Invited Speaker:

1994 Evaluation and Treatment of Thoracic Outlet Syndrome.
 St. Louis Orthopaedic Special Interest Group
 St. Louis, Missouri

1999 Determining Prognosis and Establishing Appropriate Goals for Patients
 with Fibromyalgia
 Washington University Program in Physical Therapy Alumni Day
 St. Louis, Missouri

- 2000 Muscle and Movement Imbalance - Diagnosis and Treatment
Southern Illinois Chapter IPTA, Special Interest Group
Belleville, IL
- 2002 Diagnosis and Treatment of Movement Impairment Syndromes: Lower
Quarter
Alaskan Physical Therapy Association Fall Meeting
Fairbanks, Alaska
- 2005 Carpal Tunnel Syndrome: A PT Perspective
Washington University Resident Training Series
St. Louis, Missouri
- 2005 Thoracic Outlet Syndrome
Eastern District MPTA
St. Louis, Missouri
- 2006 Rehabilitation Exercises for Scapular Muscles
The 1st Annual CASE (Center for Athlete's Shoulder and Elbow) Shoulder
& Elbow Conference
The Orthopaedic Center of St Louis
St. Louis, Missouri
- 2007 Evaluation of Scapular Movement
CASE (Center for Athlete's Shoulder and Elbow) Baseball Medicine
Conference
St. Louis, Missouri
- 2008 Scapular Movement Impairments
Annual National Baseball Team Medicine Conference: Injury Prevention
& Treatment Techniques
Sponsored by Major League Baseball
St Louis, Missouri
- 2011 Breast Cancer Rehabilitation for the Non-Women's Health Practitioner
Eastern District MPTA
St. Louis, Missouri
- 2011 Diagnosis and Treatment of Movement Impairment Syndromes
8th Annual Kim Hale Memorial Conference for Therapeutic Excellence
San Angelo, Texas
- 2011 Physical Therapy for the Patient with Cervical Pain
Washington University Physical Medicine and Rehabilitation Education
St. Louis, Missouri

- 2012 Scapular and glenohumeral movement faults associated with breast cancer treatment
Midwest Therapist Study Group
Chesterfield, Missouri
- 2013 The Shoulder: Relating the Movement Impairments to the Diagnosis.
MPTA Spring Conference
St Louis, Missouri
- 2014 Treatment of Musculoskeletal Shoulder Pain - Three Evidence Based Approaches
Illinois Physical Therapy Association
Urbana, IL
- 2015 Physical Therapy for Cervical Spine
Washington University Physical Medicine and Rehabilitation Education
St. Louis, Missouri
- 2016 Upper Extremity Exercises- Does One Size Fit All?
Washington University Program in Physical Therapy Clinical Instructors' Meeting
St. Louis, Missouri
- 2020 Shoulder Examination/Dyskinesis
Washington University Dept of Orthopedics CME
St. Louis, Missouri
- 2021 An Update on the Shoulder
Washington University Program in Physical Therapy Alumni MSI Update
St. Louis, Missouri

Research:

Clinical Consultant

Project: R01 proposal on post-traumatic joint contracture (PTJC) of the elbow
Principle Investigator: Spencer Lake, PhD, Mechanical Engineering & Materials Science, Washington University

Co-investigator

Protocol title: "Reliability and validity of visual assessment of shoulder biomechanic biomechanics using fluoroscopic imaging."

Principle Investigator: Paula M. Ludewig, PT, PhD, Division of Physical Therapy/Department of Rehabilitation Medicine, University of Minnesota.

Consulting Relationships and Advisory Panels

2001-present Physical Therapy Program, Maryville University

2007 Toyota Corporation Therapy Department

Provided education for Toyota (S. Indiana plant) Medical staff through in-service and direct observation of patient care

Bibliography:

PEER REVIEWED SCIENTIFIC AND PROFESSIONAL PRESENTATIONS:

- 1994 Evaluation and Management of Nerve Compression in the Upper Extremity in Cumulative Trauma Disorders
Joint Congress of the APTA and CPTA
Toronto, Canada
- 2005 Concentrated Education Series: Movement System Impairment - Shoulder
APTA Annual Conference & Exposition
Boston, MA
- 2010 Movement System Impairment Diagnoses Applied to the Breast Cancer Patient
APTA Combined Sections Meeting
San Diego, CA
- 2014 Exercise Prescription for Shoulder Problems: Moving Away From a "One Size Fits All"
APTA Combined Sections Meeting
Las Vegas, NV
- 2015 Exercise Prescription for Shoulder Problems
MPTA Spring Conference
St Louis, Missouri
- 2015 An Introduction to the Humeral Movement System Impairment Diagnoses
American Society of Shoulder and Elbow Therapists Annual Meeting
Asheville, NC
- 2018 Do You See a Pattern? Link the Movement Faults Across Your Exam
NEXT APTA Conference
Orlando, Florida
- 2019 The Hallmark of a Movement System Expert: Pattern Recognition
MPTA Fall Conference
St Louis, MO

2024 Shoulder Movement Analysis, Diagnosis, and Treatment Across Sports: In Water, Through Air, and Against Gravity
 APTA Combined Sections Meeting
 Boston, MA

Platform Presentations

- 1993 Changes in the Infrasternal Angle with Abdominal Contractions
 APTA Annual Conference
 Washington, DC
- 2013 Treatment of Multidirectional Shoulder Instability Guided by a Movement System Diagnosis
 American Society of Shoulder and Elbow Therapists Annual Meeting
 Las Vegas, NV
- 2015 Beers A, **Ivens R**, Kahn LC, Fox I. The Use of Donor Activation as the Guiding Rehabilitation Strategy Following Multiple Nerve Transfer Surgeries: A Case Report.
 APTA Combined Sections Meeting
 Indianapolis, IN
- 2018 **Ivens R**. Humeral Superior Glide Syndrome: Case reports describing 2 patients with different contributing factors associated with humeral superior glide.
 American Society of Shoulder and Elbow Therapists Annual Meeting
 Chicago, IL
- 2022 **Ivens RA**, Harris-Hayes M, Lawrence RL. The impact of altering scapular kinematics on the proximity between the rotator cuff footprint and the glenoid.
 American Society of Shoulder and Elbow Therapists Annual Meeting
 Atlanta, GA
- 2023 Lawrence RL, **Ivens RA**, Harris-Hayes M. The effect of scapular kinematics on mechanisms of rotator cuff injury: internal impingement.
 APTA Combined Sections Meeting
 San Diego, CA
- 2023 Lawrence RL, **Ivens RA**, Harris-Hayes M. The effect of scapular kinematics on mechanisms of rotator cuff injury: subacromial impingement.
 APTA Combined Sections Meeting
 San Diego, CA

PUBLICATIONS: (Ivens RA = Zoeller RA)

Papers

Brown JM, Yee A, **Ivens RA**, Dribben W, Mackinnon SE. Post-Cervical Decompression Parsonage-Turner Syndrome Represents a Subset of C5 Palsy: 6 Cases and Review of the Literature. *Neurosurgery*. 2010;67(6).

Lawrence RL, Ivens R, Caldwell CA, Harris-Hayes M. The effect of scapular orientation on measures of rotator cuff tendon impingement: A simulation study. Submitted *J Applied Biomechanics*

Invited Publications:

Book Chapters

Spitznagle TS, **Ivens RA**. Movement Impairment Syndromes of the Thoracic Spine in *Movement System Impairment Syndromes in the Extremities, Cervical and Thoracic Spines*. Sahrman S. Mosby, Inc. St Louis, MO; 2010.

Ivens RA, Moore AM. Thoracic Outlet Syndrome in *Nerve Surgery 2nd ed*. Mackinnon SM. Theime. New York, NY. Pending publication

Abstracts

Zoeller R, Barbee J, Rose SJ, Wright-Hinzpeter C. A Goniometric Comparison of Prone and Sitting Hip Rotation. *Physical Therapy*. 1987;67(5).

Barbee J, Wright Hinzpeter C, Rose SJ, **Zoeller R**. Reliability of an inclinometer for hip rotation measurement. *Physical Therapy*. 1987;67(5).

Wright Hinzpeter C, **Zoeller R**, Rose SJ, Barbee J. Reliability of goniometry in measuring hip rotation. *Physical Therapy*. 1987;67(5).

Zoeller RA, Sahrman SA. The Effect of Patient Position on Active and Passive Range of Medial Rotation of the Humerus. *Physical Therapy*. 1988;68(5).

Zoeller RA, Sahrman SA. Comparison of Methods for Assessing Humeral Flexion and Associated Scapular Motion. *Physical Therapy*. 1989;69(5).

Zoeller RA. Reliability of Diagnostic Resisted Movements at the Shoulder. *Proceedings of the 1990 APTA Conference*.

Duffin L, **Zoeller R**. Reliability and Comparison of Two Goniometric Measures of the Wrist. *Proceedings of the 1991 APTA Conference*.

Caldwell C, Smith LW, Stemmons VA, **Zoeller RA**, Norton BJ. Reliability of a Method for Measurement of Scapulohumeral Rhythm in Normals. *Proceedings of the 1991 APTA Conference*.

Zoeller RA, Caldwell C, Norton BJ. Reliability of Measuring the Infrasternal Angle. *Physical Therapy*. 1992;72(6, Suppl).

Ivens R, Caldwell CA, Norton BJ. Incidence of Scapular Movement Impairments and Effect on Symptoms. APTA Combined Sections Meeting 2009.

Beers A, **Ivens R**, Kahn LC, Mackinnon SE. Functional Outcomes Following Nerve Transfer Surgery for a C5-C7 Brachial Plexus Palsy are Improved with DAFRA Rehabilitation Technique. *Proceedings of the 2015 AAHS Annual Meeting*.

Saini G, Caldwell C, **Ivens R**, Sahrman S, Ludewig PM. Shoulder Movement Assessment Using Single Plane Fluoroscopy: Reliability and the Influence of Prevalence and Bias. APTA Combined Sections Meeting 2022.

Continuing Education Programs Provided:

- | | |
|--------------|--|
| 1990-present | Diagnosis and Treatment of Movement System Impairment Syndromes. Presentation and organization of several continuing education courses for physical therapists. Courses are offered at different levels: Introductory Level, Advanced Upper Quarter, Advanced Lower Quarter and Advanced Lab Course with focus on Upper or Lower Quarter. An average of 1-2 courses per year at national and international venues. |
| 1994 | Posture Management Exhibit
Nerve Compression Syndromes
Practical Anatomy and Surgical Technique Workshop |
| 2008 | Impingement & Rotator Cuff: Injury, Surgery & Rehab
Saint Louis Orthopaedic Evening Series
International Spine & Pain Institute
St Louis, Missouri |
| 2010 | Thoracic Outlet Syndrome
Saint Louis Orthopaedic Evening Series
International Spine & Pain Institute
St Louis, Missouri |
| | Thoracic Outlet Syndrome
Kansas City Orthopaedic Evening Series |

International Spine & Pain Institute
Kansas City, Missouri

2014 Annual Orthopedic Section Meeting
Lab Assistant: Integration of Shoulder Biomechanics and Movement
Classifications in Shoulder Rehabilitation
St Louis, Missouri

Conferences Attended

APTA

Combined Sections Conference
2008-2020, 2022 attended virtually, 2023, 2024

National Annual Conference
1987-1994, 2005, 2018

Missouri State Conferences
1985, 2013

American Society of Shoulder and Elbow Therapists (ASSET) 2013, 2015, 2018, 2022

Community Service Contributions

Presentations

1992, 1993	Exercise through the Middle Years Women and Infant Services, Barnes-Jewish Hospital
2005	St. Louis Acoustic Neuroma Association Support Group Presentation
2005	Exercise after Head and Neck Cancer Midwest Laryngectomy Conference
2007	Superheroes and Super Bodies Lunch and Learn Series St Louis Science Center

Other Activities Associated with Washington University Program in Physical Therapy

1996	Festival of the Ages
1997	Machinist Health Fair

1997	Southwestern Bell Health Fair
1999	Washington University School of Medicine Benefits Fair
2003	Washington University School of Medicine Employee Health Fair Screening
2007, 2011	Washington University School of Medicine Health Professions Fair, Office of Diversity
2008, 2016	Maritz Health Fair – Ask the Doctor
2009	Schnucks Health Fair - Ask the Doctor
2012	Washington University School of Medicine Health Happening, Ask the Expert
2016, 2017, 2020, 2021	Annual Volunteer Day- Washington University Physical Therapy
2024	GO St Louis Marathon

Other Activities

1994-1997	St Louis Zoo Friends
1999	Southwestern Illinois Special Olympics Volunteer
2003-2008	Sister Cities Organization
2003-2006, 2008, 2009, 2013	Susan G. Komen Race for the Cure Supporter, Fundraising
2006- 2021	Member, Missouri Botanical Gardens
2010	St Patrick’s Center Volunteer
2010, 2011, 2014, 2015	Susan G. Komen Race for the Cure Volunteer
2014	Crohn’s and Colitis Foundation, Team Challenge Fundraiser & Half-marathon participant
2023	Songs4Soldiers Benefit Columbia, IL