Jennifer M Ryan, PT, DPT, MS

Board-Certified Cardiovascular and Pulmonary Clinical Specialist 645 N Michigan Ave, Chicago, IL 60611 Jennifer-Ryan@northwestern.edu

EMPLOYMENT

Northwestern University, Chicago, IL

2019-Present: Assistant Professor 2005-2019: Associated Faculty

- Course director for Physiology 2
- Course design contributor
 - o Foundations I and II
 - o Clinical Management of Patients with Cardiovascular and Pulmonary Dysfunction I and II
 - Examination and Evaluation I
 - Introduction to Clinical Decision Making
 - Complex Patients
- Lab developer and instructor
 - o Foundations I and II
 - o Clinical Management of Patients with Cardiovascular and Pulmonary Dysfunction I and II
 - Examination and Evaluation I
- Facilitate and design written and practical exams
 - o Foundations I and II
 - Clinical Management of Patients with Cardiovascular and Pulmonary Dysfunction I and II
 - Examination and Evaluation I
- Student adviser: 2-3 students per cohort
- Acute Care Residency Co-Director
 - Mentor residents during their teaching participation in the entry level program
 - Teach Electrocardiogram relation to movement problems
 - Facilitate Combined Residency Rounds
- Neurologic Residency
 - Teach in the Neurological ICU curriculum
 - Teach case-based vital sign interpretation
 - Facilitate Combined Residency Rounds
- Orthopedic Residency
 - Teach case-based vital sign interpretation
 - Facilitate Combined Residency Rounds
- Fellowship in Advanced Orthopedic Physical Therapy Practice, Research and Education
 - Teach case-based vital sign interpretation

Rehab Education Formula, LLC, Roselle, IL

2013-Present: Owner

- Course designer and presenter
- Website and brochure designer

University of Chicago, Chicago, IL

2015-2019: Program Coordinator/ Director, Critical Care Fellowship

- Lead Physical Therapist for the Medical Intensive Care Unit
- Physical Therapy Critical Care Fellowship mentor
- Physical Therapy Critical Care Fellowship and Occupational Therapy Residency faculty
 - Lecturer of didactic segments related to respiratory failure, acid-base physiology, and oxygen delivery
 - Annual program modification and coordination with Occupational Therapy program elements
 - Critical Care Fellowship Program redesign to enhance interprofessional experiences with medical and surgical services

Trainees

University of Chicago Critical Care Fellowship

- Allison DeWitt, PT, DPT, Board Certified Cardiovascular and Pulmonary Clinical Specialist
- Elizabeth Steele, PT, DPT Board Certified Cardiovascular and Pulmonary Clinical Specialist
- Cristiane Meirelles, PT, PhD, Board Certified Cardiovascular and Pulmonary Clinical Specialist
- Colleen Ward, PT, DPT, Board Certified Cardiovascular and Pulmonary Clinical Specialist
- Peter Herbst, PT, DPT, Board Certified Cardiovascular and Pulmonary Clinical Specialist

Governors State University, University Park, IL

2005 to 2009: Adjunct Faculty Member

- Instructor in Cardiovascular and Pulmonary Physical Therapy
 - Lecture presentation
 - Small Group facilitation
 - Exam development
 - Student mentoring

Rush University, Chicago, IL

1990-2001; 2004-2015: Senior Physical Therapist

- Primary Physical Therapist in the Medical, Surgical and Cardiac ICU's
- Inpatient Acute, Inpatient Rehab, Skilled Level Care, and Outpatient experiences in a large urban facility.

Northwestern Memorial Hospital, Chicago, IL

2003-2004: Resource Coordinator for Orthopedics and Neurological Services

Patient care and staff mentoring

Sherman Hospital, Elgin, IL

2001-2003; 2004-2008: Inpatient Manager for Physical Therapy; Outpatient Therapy

- Inpatient manager
- Acute Care educator for Physical, Speech and Occupational Therapy
- Outpatient physical therapy float position

EDUCATION

Rosalind Franklin University of Medicine and Science, North Chicago, IL

2002-2004: Transitional Doctor of Physical Therapy

• Final project: "Acute Care Laboratory Values and Electrocardiogram Findings Interpretation and Clinical Reasoning."

Finch University of Health Sciences/ Chicago Medical School, North Chicago, IL

1998-2002: Master of Science in Physical Therapy

- Thesis: "A Comparison of Verbal and Written Instruction for Symptom Management for Inpatients in the Cardiomyopathy and Transplant Unit."
- Independent Study project: "Shortness of Breath Clinical Decision-Making Tree"

University Of Illinois at Chicago, Chicago, IL

1988-1990: Bachelor of Science in Physical Therapy

University of Illinois at Urbana-Champaign, Urbana-Champaign, IL

1986-1988: Pre-Physical Therapy requirements

• Honor Roll Spring 1988 semester

LICENSURE

State of Illinois

1990-Present: Physical Therapist License Number 070.006290

TRAINING

2022

- Exploring Experiences and Language of Diversity, Equity, and Inclusion
 - o Respiratory Health Association
- Feinberg School of Medicine Curriculum Bias Checklist orientation and mechanism for students to report bias in curriculum education

2021

- Workshop on Unconscious Bias
 - Department of Physical Therapy and Human Movement Sciences
- Foundation Research Grants: Tips on How to be a Successful Applicant and What Happens When You Are
 - Foundation for Physical Therapy
- Post Conference course, Advanced Topics in Dementia
 - APTA Geriatrics

2020-2022

- Feinberg Academy Medical Educators Certificate Program
- Northwestern University Education Technology Fellow

2019

- New Faculty Development Workshop
 - Searle Center for Advanced Learning and Teaching
- Faculty Development Workshop
 - o Academy of Physical Therapy Education

2017

- Leadership Training
 - The Advisory Board. Collaborative leadership training at the University of Chicago
- Leadership Development
 - o APTA

2016

- Leadership Development
 - o APTA

HOSPITAL APPOINTMENTS

Shirley Ryan AbilityLab

2019-present

Supplemental staff

University of Chicago Hospitals

2015-2019

Program Coordinator in Critical Care

Rush University Medical Center, Chicago, IL

1990-2001; 2004-2015

Senior Physical Therapist

Northwestern Memorial Hospital, Chicago, IL

2003-2004

Resource Coordinator of Orthopedic and Neurological Services

Sherman Hospital, Elgin, IL

2001-2003; 2004-2008

- Inpatient Acute and Subacute Physical Therapy Team Leader in a Level 2 Trauma Center
- Outpatient Care

HONORS AND AWARDS

- 2022 Nominee "Canvas Hall of Fame", Northwestern University
- 2014 Acute Care Section Lecture Award, APTA
- 2012 Mary Sinnott Award for Clinical Excellence in Acute Care, APTA
- 2008 Illinois Physical Therapist of the Year, IPTA

PROFESSIONAL ORGANIZATIONS

American Physical Therapy Association

1989-Present: Member

- 2019-2021: Appointed Member of the Special Committee to the House of Delegates to Amend and Propose Bylaws (SCB)
- 2019-present: Practice Analysis Coordinator: Acute Care Residencies and Critical Care Fellowships Practice Analysis Survey and development of descriptions of specialty, residence, and fellowship practices.
- 2014-2015: Productivity Staff Taskforce

APTA Acute Care

1997-Present: Member

- 2019-present: Vice President
- 2007-2010: Nominating Committee Member
- 2007-2010 and 2019-present: Development of the Practice Analysis survey
- 2007-2010: Implementation and publication of the Practice Analysis survey
- 2009 Design and submission of the application for specialization to the American Board of Physical Therapist Specialists (ABPTS); in process at present
- 2007-2010 Subject Matter Expert: Task Force to define Acute Care as a specialty.

APTA Cardiovascular and Pulmonary Section

1995-present: Member

- 2007-2020: Education Chair and Board of Director member
- ABPTS participant in qualitative analysis of Cardiovascular and Pulmonary board certification exam

Academy of Physical Therapy Education

2019-Present: Member

Academy of Orthopedic Physical Therapy

1991-95, 1999-01: Member

Illinois Physical Therapy Association

1989-Present: Member

- 2020-2021: Member Illinois Physical Therapy Association Awards Committee
- 2020-present: At Large Delegate, Illinois Chapter
- 2016-2019: Chief Delegate, Illinois Chapter
- 2004-2018: Delegate to the APTA House of Delegates
- 92-98, 03-present: Assembly Representative for the Illinois Assembly of Representatives
- 1/97-1/99, 2005-2012: Editor, PT Priority Illinois Physical Therapy Association Newsletter
- 2005-2007, 2009 –2010: Northern District Vice-Chair
- 2007-2009, 2011: Northern District Chair

PROFESSIONAL ACTIVITIES

Respiratory Health Association, Chicago IL

2014-Present: Board of Directors

Depositions

2007: Deposition participation for case content in a case related to an ongoing patient

2000: Deposed in a defense case for Rush University Medical Center

PRESENTATIONS

<u>American Physical Therapy Association</u>

2022 San Antonio, TX

- Advancing Acute Care Practice: One Future Specialist at a Time
- Teaching Cardiovascular and Pulmonary Exam Techniques using a Novel Approach and Mastery Learning Techniques
- Variable Physiological Responses to Acute Intermittent Hypoxia in Healthy Participants
- Effective Teaching Strategies to Convert Cardiovascular Physiology Non-Believers

2019 Washington, DC

• Is Your Career Plan Keeping Up with the Future of Physical Therapy Care in the ICU?

2018 New Orleans, LA

How Hospitalization Precludes Your Patient from Returning to Their PLOF

2015 Nashville, TN

• Where Do I Begin When Treating the Medically Complex Patient?

2014 Las Vegas, NV

- Defining Clinical Competence in the ICU
- Do You Own Your Practice? Owning Your Decisions and Behaviors

2013 San Diego, CA

- Clinical Reasoning for the Patient with Complex Cardiovascular and Pulmonary Dysfunction: From Critical Care to Rehab
- How Clinical Reasoning Can and Should Impact Interprofessional Communication that Hinders Acute Care Practice

2011 New Orleans, LA

PT Examination and Interventions for Older Patients with Heart Failure: Lecture and Lab

2010 Boston, MA

- Acute Care Specialization Update
- The Complex Patient

2008 San Antonio, TX

1999 Seattle, WA

• The Matrix: A Tool to Understand the Cardiopulmonary Changes with Exercise and Disease

• The Shortness of Breath Decision Making Tree

Illinois Physical Therapy Association

2022

- Vital Sign Measurement and Interpretation
- Variable Physiological Responses to Acute Intermittent Hypoxia in Healthy Participants

2021

• Vital Sign Measurement and Interpretation of the Aging Client

2018

• How Hospitalization Precludes Your Patient from Returning to Their PLOF

2013

 Tailoring Physical Therapy Treatment to Achieve Optimal Function for a Patient with Multiple Sclerosis Receiving Intrathecal Baclofen Therapy: A Case Report

2010

An Update on Antihypertensive Medication

2009

The Comprehensive Management of the Complex Patient

2007-2017

• Know When to Say When: How to Determine Your Patient's Activity Tolerance

Spring 2007 Tri-District

Winter 2008 Southern District

Winter 2008 Chicago Area Director's Forum

February 2009 IPTA Central District

November 2009 IPTA West Central District

September 2011 IPTA Fall Meeting

1998

Shortness of Breath Decision Making Tree

Peer Reviewed Presentations

Governors State University

2021

 Physical Therapy Rehabilitation of an Elderly Inpatient with Post-Acute COVID-19 Syndrome: A Retrospective Case Report

Northwestern University

2021

- Using Structured Student Interaction to Enhance Student Performance
- Effective Teaching Strategies to Enhance a Growth Mindset Medical Education Day, September

Evidence In Motion

2020

• Acute Care 101

University of Chicago

2018

• Seeing Versus Doing: A Comparison of Observers Versus Doers During a Novel Interprofessional Discharge OSCE. McKinnon M, Chandiramani A, Stulberg M, Ryan J, Farnan J, Arora V. University of Chicago Research Symposium. April 2017.

Rush University

1999

Shortness of Breath Decision Making Tree

Invited Lectures

University of Chicago

2019

• Laboratory Value Interpretation in the Critically III Patient, Northwestern University Physical Therapy and Human Movement Sciences

2015

- Post Intensive Care Syndrome, Northwestern University Physical Therapy and Human Movement Sciences
- 2014
- Why ICU Patients Should be the High Priority Patients, Jesse Brown VA

2011

- Multisystem Examination for Patients with Lymphedema and Comorbidities, Klose Lymphedema Conference 2010
- Antihypertensive Use with the Elderly, Midwestern University

2008

Management of Patients with Pulmonary Disorders, University of Illinois at Chicago

2008-2018

- Management of Patients with Pulmonary Disorders PT 635, 2007, 2013
- Do You Feel Like Your 'Get Up and Go' Got Up and Went?, Scleroderma Foundation
- 2001-2008
- Management of the Critically III Patient Heart Failure, Cardiac Transplant and Lab Value interpretation, Rosalind Franklin University of Medicine and Science

EDITORIAL RESPONSIBILITIES

Illinois Physical Therapy Association

1997-99, 2005-12: Editor

• PT Priority, The Illinois Physical Therapy Newsletter

APTA Geriatrics

2008: Guest Editor

GeriNotes, APTA Geriatrics Newsletter

REVIEW RESPONSIBILITIES

APTA Acute Care

2010-Present: Journal reviewer

Journal of Acute Care Physical Therapy

Northwestern University 2021: Submission reviewer

• TEACHx 2021

PUBLICATIONS

Peer Reviewed:

- Ryan JM, Do You Own Your Practice? Owning Your Decisions and Actions. JACPT. 2014;5:54-8.
- Ryan JM, Gorman SL. How Clinical Reasoning Can and Should Impact Inter Professional Communication to Address Behaviors that Hinder Acute Care Practice. JACPT. 2013;5(1):18-29.
- Gorman SL, Hakim EW, Johnson W, Bose S, Harris KS, Crist MH, Holtgrefe K, Ryan JM, Simpson MS, Coe JB. Nationwide Acute Care Physical Therapist Practice Analysis Identifies Knowledge, Skills, and Behaviors That Reflect Acute Care Practice. Phys Ther. October 2010 vol. 90 no. 10 1453-1467.
- Frownfelter D, Ryan J. Dyspnea: Measurement and Evaluation. J Cardiopulm Phys Ther. 2000;11:7-12.
- Ryan JM "The Patient in the Community" chapter 41 in Cardiovascular and Pulmonary Physical Therapy, 5th Ed, Elsevier. 2012. 6th Ed 2021 planned.
- Ryan JM, Frownfelter D. Shortness of breath clinical decision-making tree. Cardiopulmonary Physical Therapy Journal. 9(4):19, October 1998.
- McKinnon M, Chandiramani A, Stulberg M, Ryan J, Farnan J, Arora V. Seeing versus doing: A comparison of observers versus doers during a novel interprofessional discharge OSCE. SGIM. June 2017.
- Ryan J, Frownfelter D. Shortness of Breath Clinical Decision-Making Tree-Abstract. J Cardiopulm Phys Ther. Fall 1998;9(4):19.

Non-Peer Reviewed:

- Ryan J. Antihypertensive Medication Use with the Elderly. Gerinotes. 2008;15(5):17-20.
- Getting Around: Community Mobility. PT_in_Motion. 2017.
- Book Chapter: Cardiovascular and Pulmonary Physical Therapy, 6th Edition: The Patient in the Community, 2022
- Cardiovascular and Pulmonary Physical Therapy, 5th Edition: The Patient in the Community,
 2012