

Circus Fusion

Presented by The Circus Doc

Emily Scherb, PT, DPT

Online

OBJECTIVES

- 1) Participants will understand the circus artist as an athlete and the demographics and culture of the circus community.
- 2) Participants will learn about the characteristics of circus injuries and mental health concerns as presented in the most recent literature.
- 3) Participants will appreciate the normative values and ranges of circus artists' movement and strength measures relative to the general population and our current understanding of the biomechanics of the spine, shoulder, and hips and how they accommodate the large range of motion, high forces, and unique demands of circus arts.
- 4) Participants will understand the significance of using movement as a treatment guiding principal and will be able to recognize common movement patterns of the spine, hip, and shoulder of circus artists as a framework for treatment and exercise prescription.
- 5) Participants will learn landmarks and movement patterns for assessment of fundamental circus movements performed in most disciplines. This will allow them to have an understanding of both the range of motion and the most efficient pathways for skill performance.
- 6) Participants will learn exercises and specific cuing to make them most effective for circus artists and for the movement patterns that are most common to ensure proper performance.
- 7) Participants will learn return to sport criteria and progressions to enable them to progress back to training and performance.
- 8) Participants will learn techniques and practices to attract circus artists and promote circus medicine in their clinical practice.

COURSE OUTLINE

Module 1

Introduction: What is Circus?

- Welcome, introduction, and context.

Module 2

Circus Culture and Artist Perceptions

- Barriers to care
- Demographics of participants—Enhancing credibility
- Taking a history from a circus performer

- History and growth of circus at all levels
- Familiarization with equipment and skill names

Module 3

Common Characteristics and Injuries in Circus Artists

- Overview of injury rates in current literature and experience
- Biomechanical and Psychosocial factors

Module 4

Science of Circus Training

- Applying sport science principles to circus training

Module 5-9

Movement System Framework for Common Circus Movement Dysfunctions

- Introduction to the concepts of working from a movement system framework.
- Utilization of a movement diagnosis framework to identify common movement patterns and pathways in circus artists at the spine, hips, and shoulders including videos and case studies to demonstrate applications in this population.

Modules 10-11

Circus Skills Assessment - Ground and Aerial Acrobatics

- Discussion of common circus movements and the best way to assess them.
- Identification of the range of motion and strength needed for common circus skills.
- Identification of landmarks for evaluation and assessment of common circus skills.
- Corrective cuing for optimal performance of fundamental movements

Modules 12-16

Exercise Prescription for Circus Artists

- Considerations when working with circus artists.
- Exercises, cues, and patient education for correction of common movement impairments in circus artists
- Exercise selection for aerial artists and return to training progressions.
- Return to training paradigm for circus artists.

Module 17

Marketing a Circus Practice

- How to engage techniques and practices to attract circus artists and promote circus medicine in their clinical practice setting.

Case Studies

- Live patient evaluation demonstrations of two circus artists one with an upper quarter issue and one lower quarter .

Office hours / Discussion time

- Bi-weekly time for Q&A and discussion of implementation of concepts

Curriculum Vitae

Personal Information

Emily Scherb, PT, DPT

Emily@PureMotionPT.com

www.puremotionphysicaltherapy.com

www.thecircusdoc.com

Education

Washington University Program in Physical Therapy St. Louis, MO

- 2006 – 2009
- Doctor of Physical Therapy

Washington University in St. Louis St. Louis, MO

- 2001 – 2005
- A.B. Physical Anthropology
- Minor Modern Dance

Licensure

Licensed Physical Therapist in Washington since 2009

Licensed Physical Therapist in Oregon since 2019

Awards

Washington University in St. Louis School of Physical Therapy

2020 Alumni Achievement Award

Employment History

Owner and Physical Therapist

Pure Motion Physical Therapy, PLLC

Seattle, WA

- 6/2013 – Present
- Physical therapy practice specializing in the care and treatment of circus artists
- Presenting education to circus artists, instructors, and physical therapists on the unique challenges and stresses on circus bodies as “The Circus Doc”
 - Presentation of research updates through monthly Circus Smart Speaker Series
 - Online courses and webinars for circus educators and healthcare providers

Fellowship Regional Mentor Washington University Program in Physical Therapy

- 8/2015 – 2021
- Mentor for Movement System Clinical Fellowship teaching others to effectively diagnose and treat movement impairment syndromes

Company Physical Therapist Acrobatic Conundrum Seattle, WA

- 2016 – Present
- Available for consult while the company is on tour and for in person care of performers when they are in Seattle.

Resident Physical Therapist School of Acrobatics and New Circus Arts(SANCA) Seattle, WA

- 6/2013 – Present
- Lecturer for the Pre- Professional Program and staff training
- Physical therapist for staff and student needs

Aerial Arts and Flying Trapeze Coach

- 5/1998 – 2018
- Various locations including SANCA(2009- 2018), Trapeze School New York(multiple locations 2003-8), Circus Center (San Francisco 2007), Circus Harmony (St. Louis 2002-3), Sports and Arts Center at Island Lake (1998 - 2001)

Physical Therapist Active Physical Therapy Seattle, WA

- 1/2011 – 5/2013

Physical Therapist Action Reaction Physical Therapy Seattle,
WA

- 7/2009 – 12/2011

Flying Trapeze School Manager Trapeze School New York New York, NY

- 8/2005 – 7/2006
- Management of staff education, scheduling, and inventory

Publications

Scherb E. *Applied anatomy of aerial arts: an illustrated guide to strength, flexibility, training, and injury prevention*. North Atlantic Books, 2018.

Scherb E, Heineman H, Muci D. Circus 101: Features and Feats of Circus Bodies. In: *Clinical Management of Circus Arts*. Academy of Orthopaedic Physical Therapy. 2022

Scherb E, Heineman H. Aerial Athletes: Flying, Hanging, Wrapping, Catching. In: *Clinical Management of Circus Arts*. Academy of Orthopaedic Physical Therapy. 2022

Scherb E. Low Back Pain in Circus Artists: Using a Movement System Impairment Framework as a Component of Care. *Orthopaedic Physical Therapy Practice* 34.3 (2022): 148-151.

Lectures and Workshops

Circus Fusion

- Various dates March 2021 – present
- Online continuing education course for healthcare providers who are looking to learn more about working with circus artists

Instructor Boost

- Various dates June 2021 – present
- Continuing education for experienced circus instructors on the biomechanical background of circus movements and musculoskeletal health in circus

Evaluation and Treatment of Circus Artists: The Hanging Athlete

- Various Dates 4/2017 – Present
- Locations including; Boston, MA, Portland, OR, Los Angeles, CA, Charlotte, NC, New York, NY
- Continuing education course for Physical Therapist continuing education on assessment, common injuries and treatment of circus artists

Shoulder Movement Analysis, Diagnosis, and Treatment Across Sports: In Water, Through Air, and Against Gravity

Combined Sections Meeting of the APTA

Boston, MA

- February 2024
- Presented with Drs. Shirley Sahrmann, Robert Ohashi, Ann Crowe
- Lecture outlining a common shoulder movement diagnosis and what treatment looks like in a swimming, tennis, and circus population which all utilize the shoulder overhead

Concussion Guidelines Update American Circus Educators Conference Virtual

- November 2023
- Presented with Dr. Liz Corwin
- Updating the circus educator community on best practices with regard to concussion management and common course of treatment for those who are injured.

Does Circus Have to Hurt?

American Youth Circus Organization

Seattle, WA

- August 2023
- Presented with Dr. Sydney Schack-Farnell
- Presenting pain science lecture/workshop to pre-professional circus artists and circus instructors

Straight arm hanging analysis and corrective exercises for aerial artist's shoulders

PAMA Symposium

New York, NY

- July 2023
- Lecture/Workshop on the specific demands on the shoulder in aerial artists
- The Performing Arts Medical Association (PAMA) consists of medical professionals who are invested in furthering the knowledge surrounding the care of performing artists

Prevalence of Urinary Incontinence and Other Pelvic Floor-related Symptoms in Circus Artists

PAMA Symposium

New York, NY

- July 2023
- Presented with Drs. Brooke Winder and Heather Heineman
- Based on novel research conducted by the presenters

Evaluation and Treatment of the Shoulder Girdle of Aerial Artists from a Movement Systems Perspective

Presented at the Combined Sections Meeting of the APTA

Denver, CO

- February 2020

- Presented with Dr. Lynnette Khoo-Summers
- Lecture on the specific demands on the shoulder in aerial artists

Hanging Analysis of Aerial Artists

IADMS

Montreal, Quebec

- October 2019
- Presented with Dr. Lynnette Khoo-Summers
- Lecture/Workshop on the specific demands on the shoulder in aerial artists
- International Association of Dance Medicine and Science (IADMS) consists of medical and dance professionals who are invested in furthering the knowledge surrounding the care of performing artists

Evaluation of Aerial Artists

PAMA Symposium

Orange, CA

- June 2018
- Lecture/Workshop on the specific demands on the shoulder in aerial artists
- The Performing Arts Medical Association (PAMA) consists of medical professionals who are invested in furthering the knowledge surrounding the care of performing artists

Circus Anatomy and Injury Prevention Workshops

- 2014 – Present
- Various circus schools around the country including Fly Circus Space (New Orleans 2/2018), Esh Circus Arts (Boston 4/2017), Cirque School LA (Los Angeles 8/2016) SANCA (Seattle 3-4 x annually), Versatile Arts (Seattle annually), Bumbershoot (St. Louis 10/2015, 11/2017), Aloft (Chicago 9/2014)

Teacher Training Aerial Anatomy and Biomechanics

Versatile Arts

Seattle, WA

- Annually 2017 - 2023
- Anatomy and biomechanics of aerial artists with common movement faults presented to instructors and instructors in training at Versatile Arts

Perform Forever: From Hanging to Handstands

Seattle, WA and Atlanta, GA

- 12/2016 – Seattle 7/2017 Atlanta, GA
- A full day workshop for aerial artists, circus instructors, and hanging athletes that focused on education to enable safe sustainable training and injury prevention

Teaching Circus with the Body in Mind

American Circus Educators Conference

San Francisco, CA

- October 2016
- Presentation for top circus instructors from around the United States on recognizing common postural alignments, injuries, and movement faults with education on how to improve the language and cues used to improve teaching methods

Circus Anatomy Circus Now at Chicago Contemporary Circus Festival Chicago, IL

- 3/2013
- Anatomy lecture for professional and pre-professional circus performers and circus instructors

Functional Circus Anatomy American Circus Educators Conference Seattle, WA

- 9/2012
- Day long functional anatomy workshop for circus educators gathered from around the United States

Membership

American Youth Circus Organization / American Circus Educators

- 2012 – Present
- Board Member 2022 – present

Seattle Dance and Performing Arts Medicine

- 2010 – Present
- Board Member 2019 – 2024

American Physical Therapy Association

- Orthopedic Section
 - Performing Arts Special Interest Group
- Sports Section

International Organization of Dance Medicine and Science

- 2012 – present

Performing Arts Medicine Association

- 2013 – present