

## NPTA 2018 Spring Conference Speaker & Course Description

**NECHAMA KARMAN, PT, MS, PcS**

7.5 contact hours

### **“LINKED: Breathing & Postural Support”**

#### **COURSE DESCRIPTION**

This course will challenge the practitioner to make a paradigm shift; acknowledging the importance of the cardiopulmonary system as an integral component of postural control for patients of all ages. The speaker will present a model of postural control (Soda Pop Can Model) that demonstrates how breathing mechanics are linked to motor and physiologic behaviors. This is the cornerstone for the speaker’s multi-system clinical approach to the evaluation and treatment of trunk and/or respiratory impairments for patients with weakness or paralysis. The speaker will finish the day by presenting how to use this information clinically to develop positioning and ventilatory strategies that establish the pulmonary system as an asset rather than a liability for patients.

#### **COURSE OBJECTIVES**

**At the conclusion of the course, participants should be able to:**

1. Use the Soda Pop Can Model to describe how the mechanics of breathing and postural control are inter-active and inter-dependent components of normal movement strategies.
2. Describe the multiple, simultaneous roles of the diaphragm as related to breathing, postural control, gastroesophageal reflux, constipation and venous return.
3. Describe how the cardiovascular-pulmonary, neuromuscular, musculoskeletal, integument-fascial, and internal organ systems interact to simultaneously support the physiology and the physical functions of the trunk which are necessary to upright postural control (sitting, standing, walking).
4. Position patients for optimal cardiopulmonary function (physiological and biomechanical) with simple equipment such as towel rolls and pillows in recumbent and upright positions for use in and out of hospital settings.
5. Optimize the patient’s motor function by integrating appropriate ventilatory strategies with all movements from low level activities such as taking a breath off of a ventilator, to rolling over in bed, or to high level skills such as running.
6. Apply theoretical concepts to multiple clinical cases throughout the day.

8:00 - 8:30	Registration
8:30 - 10:30	<u>Lecture</u> : Breathing and posture: Part 1 - Pressure control (Soda pop model)
10:30 - 10:45	Break

10:45 - 12:00	<u>Lecture:</u> Breathing and posture: Part 2 - The diaphragm
12:00 - 1:00	Lunch
1:00 - 2:00	<u>Lecture:</u> Breathing and posture: Part 3 - The vocal folds
2:00 - 2:30	<u>Lecture:</u> Normal and abnormal chest wall development and function
2:30 - 2:45	Break
2:45 - 4:00	<u>Mini-lab:</u> Positioning strategies: What can you do in 90 Seconds or less that has a profound and lasting effect?
4:00 - 5:30	<u>Mini-lab:</u> Ventilatory or movement strategies: Integrating neuromuscular, musculoskeletal, respiratory and sensory systems

---

**BILL BOISSONNAULT, PT, DPT, DHSc, FAAOMPT, FAPTA**

7 contact hours

**Direct Access and Medical Screening: the Sherlock Holmes Approach**

**The patient you are seeing for low back, hip or neck pain; any reason to be suspicious of occult cancer or infection, or a fracture?** An important element of clinical decision making for therapists is recognizing red flag warning signs that a patient should see a medical doctor. This seminar will help prepare the therapist to assume the role of an interdependent practitioner working within a collaborative medical model. A proposed examination scheme designed to promote efficient and effective collection of patient red flag findings will provide the structure for our discussions. Professional communication with patients and medical doctors will also be a central theme throughout the seminar. A combination of lecture, small group activities/discussion, and laboratory sessions will constitute the learning experiences.

**Patient cases will be presented to apply the important medical screening principles. For example:**

- 1) **Susan** states she is having some unusual neck pain. She has spent hours and hours working at a Potter's wheel the past 2-3 weeks. She is wondering if her neck posture during pottery-making could be causing her neck pain?

- 2) **Jeremiah** describes L chest wall pain-started 6 months ago while doing some “power mowing”-“think I pulled a muscle”. He has been improving slowly-noting he can swim and power pain free if he tapes his chest. He wants to know how much longer will it take for this too heal?
- 3) **Jim** describes joint pain in his arms and wonders if strengthening exercises would be good for him?
- 4) **Amber** states she woke up three days ago with intense burning in her L shoulder blade. She describes having a severe back injury 1 year ago-which PT helped. She is wondering if her back injury could have set her up to have this shoulder pain.

For the above, 1 patient required an urgent referral, 1 a non-urgent referral, 1 a recommendation to see a physical therapist within the next couple of days and the 4<sup>th</sup> patient no action at all! Can you match the 4 patients with the 4 outcomes? Can you think of key questions to help you identify the patients needing to see a medical doctor? During the course we will use a number of cases such as these to explore critical red flag questions, including what is the best first question for us to ask facing real-life scenarios like the above.

Objectives: Upon completion of the seminar the participant will be able to:

- compare and contrast the therapist’s role and responsibilities to that of physicians associated with the differential diagnosis/medical screening process.
- integrate the medical screening principles into an efficient and effective patient examination scheme.
- evaluate history and physical examination findings (red flags), and decide whether communication with a physician is warranted regarding a patient’s health status, and indications for imaging.
- employ strategies to facilitate professional communication between therapist and physician and therapist and patient; including when, how and what to communicate as part of a patient referral.
- describe the risk factors, pathogenesis and clinical manifestations of selected medical conditions and medications representing the various body systems.
- compare and contrast, vascular/neurogenic claudication, osteoarthritis, rheumatoid arthritis, ankylosing spondylitis, musculoskeletal cancer,, infection, abdominal aortic aneurysm, kidney stones, related to risk factors, and signs and symptoms clinical manifestations
- effectively pursue additional information associated with differential diagnosis by the therapist.

#### References:

1. Boissonnault WG, Badke MB, Powers JM. Pursuit and implementation of hospital-based outpatient direct access to physical therapy services: An administrative case report. *Phys Ther.* 2010; 90(1):100-109.

2. Boissonnault W, Ross M. Physical therapists referring patients to Physicians: A Review of Case Reports and Series. JOSPT. May, 2012;42(5);446.
3. Deyo R. Imaging Idolatory. Arch Intern Med. 2009;169(10):921-923.
4. Enthoven W., et al. Prevalence and “red flags” regarding specific causes of back pain in older adults presenting in general practice. Phys Ther. 2016;96(3):305.
5. Hillegass E et al. Role of physical therapists in the management of individuals at risk for or diagnosed with venous thromboembolism: Evidence-based clinical practice guideline. Phys Ther. 2016;96(2):143.

### **Course Schedule:**

TBD

---

### **JILL SCHIFF BOISSONNAULT, PT, PhD, WCS**

7 contact hours

#### **Case-Based Management of Musculoskeletal Dysfunction in the Obstetric Client**

#### **Objectives**

Upon completion, participants should be able to:

1. Understand and apply to patient care the pathophysiology of various obstetric musculoskeletal disorders commonly seen in this population.
2. Appreciate current evidence for the tests, measures, and interventions applicable to these conditions.
3. Possess an awareness of selected outcome measures appropriate for these patient-diagnoses

#### **Course Description**

This seminar will concentrate on presentation of case-specific pathophysiology and related evidenced-based examination and management techniques for the obstetric client with particular musculoskeletal dysfunctions. The course will cover the diagnoses of pelvic girdle pain (including pubic symphysis dysfunction and sacroiliac dysfunction) in pregnancy, HNP during pregnancy and delivery, transient osteoporosis of the hip in pregnancy, and postpartum coccydynia, as well as a look at current evidence in assessment and management of diastasis recti abdominis.

The course will include lecture as well as demonstration of selected examination and manual techniques, exercise with some participant practice, demonstration of commonly used belts and supports, and small and large group discussion on client education and client self-management strategies.

This course is geared at an intermediate level but most content should be understood by students and novice practitioners.

### **Course Schedule**

7:30 am-7:45 am	Course Overview and Introduction
7:45 am-10:00 am	Management of Pelvic Girdle Pain (PGP) in Obstetrics
10:00 am-10:45 am	Exhibitor Break
10:45 am-12:00 pm	PGP continued, then HNP in pregnancy
12:00 pm-1:30 pm	Business Meeting/Lunch
1:30 pm-2:30 pm	Transient Osteoporosis of the Hip in Pregnancy
2:30 pm-3:00 pm	Postpartum Coccydynia
3:00 pm-3:15 pm	Break
3:15 pm-4:00 pm	Postpartum Coccydynia, continued
4:00 pm-5:00 pm	Diastasis Recti Abdominis

---

**HEATHER KNIGHT, PT, DPT, NCS, CBIS and**

**MIKE WALLSANDT, PT, DPT, OCS**

7 Contact Hours

#### **Concussion Management for the Physical Therapist: From Pediatrics to the Older Adult**

*(Note: this course will take place across the street at the UNMC PT Ortho Lab, Bennett Hall room 4016.)*

#### **Learning objectives:**

By the end of the course, participants will be able to do the following:

1. Describe the pathophysiology, common clinical presentations, and foundational concepts behind concussion management.
2. Identify risk factors for determining prognosis and outcomes following a concussion.
3. Perform common test and measures for evaluation and treatment of individuals with post-concussive syndrome.
4. Develop a plan of care and specific interventions when provided with case examples of a person recovering from a mild TBI.

### **Course Schedule**

7:00 – 7:30	Registration
7:30 – 8:30	Foundational Concepts

8:30 – 10:00	Assessment
10:00 -10:30	Break With Exhibitors
10:30 - Noon	Lab on assessment techniques
Noon – 1:30	Business Meeting Luncheon
1:30 – 2:45	Managing the plan of care including intervention planning
2:45 – 3:00	Break
3:00 – 4:15	Lab with case application
4:15 – 4:45	Wrap Up