

3-DAY (22 HOURS) LEVEL 1 PROFESSIONAL COURSE



It can be overwhelming to work with individuals with spinal cord injury (SCI), due to the wide impact of paralysis in the shoulders, arms/hands, core, hips and lower extremities. *Where do we begin?*

By first creating awareness, connection, and strength in the areas that the individual has the most access to (the shoulders), we can leverage this access point to create stability in the trunk and beyond. Following properties of fascial tensegrity, individuals with SCI can access “paralyzed areas” to become more competent in foundational movement patterns, such as rolling over, transitions to sitting, and general spine, hip and lower extremity control in and out of their wheelchair.

In this workshop, participants will explore with demo SCI clients and experience first-hand what it means to work through the fascia to increase stability, control and integration below their level of injury. Participants will develop skills for assessment and learn exercises appropriate for cervical-level and thoracic-level SCI clients, while empowering movement curiosity and confidence for sustainable training programs.

You and your clients don't have time to waste when it comes to figuring out what does - *and doesn't* - work for SCI rehab. The process of body re-integration after spinal cord injury can be distilled into a **simple, easy-to-follow progression**. This course will make that process clear for you - and your clients.

FAST-TRACK LEARNING AND BRING YOUR SCI REHAB PROGRAM TO A WHOLE NEW LEVEL.



In this course, participants will learn:

- Our Framework for Recovery and how to re-connect clients to their paralyzed areas in an organized progression.
- A new assessment protocol that quickly highlights disconnects.
- Fascial lines and how to apply them in programs to build trunk stability, hip stability, and efficient gait patterns.
- Floor-based exercises & progressions to use in session and to assign as home programs.
- Pilates principles and Bartenieff Fundamentals which ask for full body integration in every exercise.
- Coaching cues and equipment set-ups (inputs) for quick changes in performance (outputs).
- How to use equipment (Pilates or mimic in an ABT clinic setting) for faster and more permanent motor learning.
- Essential movement concepts we should be teaching our clients through our own personal movement experiences.
- Exercises & programming considerations specific to cervical and thoracic SCI
- and practice with real SCI client demos!

Includes:

- Course guidebook, complete with photos & links to video tutorials
- Squish-ball to take home or give to a client
- Invitations to [free] quarterly office hours to discuss cases
- Invitation to audit future Level 1 courses [free]

Courses hosted at ABT facilities will cover the base curriculum and explore pilates exercises & principles using the floor, simple props & standard ABT equipment (bands, balls, etc), while courses hosted at Pilates studios will showcase the Framework implemented on Pilates equipment.

DAY 1

Spend the majority of the first day learning the following concepts through discussion & personal movement experiences:

- Our signature Framework for Recovery
- The six fascial lines and how to access them through position and movement.
- Pilates mat work that covers fundamental movement patterns often missing in SCI clients.
- Bartenieff Fundamentals which ask for full body integration in every exercise.
- A new assessment protocol that quickly highlights disconnects.

**DAY 2**

Apply concepts & experiences felt on Day 1 with our cervical SCI demo models:

- Assessments to observe strength & coordination of the shoulder girdle & trunk.
- Programming considerations and exercise selection specific to cervical SCI clients.
- Coaching strategies to improve movement quality through ingrained compensation patterns.
- Use of equipment to support movement in those with limited function.
- Floor-based exercises (“drills & transitions”) appropriate for cervical SCI clients.
- Collaborative session planning & home exercise design for our demos.

DAY 3

Continue to apply concepts & experiences with our thoracic SCI demo models:

- Assessments to observe spine & hip control.
- Programming considerations and exercise selection specific to thoracic SCI clients.
- Coaching strategies to improve movement quality through ingrained compensation patterns.
- Creative use of equipment to direct lower body integration.
- Intermediate & advanced floor-based exercises and how to quickly modify them for individual clients.
- Collaborative session planning & home exercise design for our demos.



REFERENCES

1. Anderson, Brent. "Alignment, Load and Tempo: a practical and effective way to create change." *Balanced Body's Pilates on Tour*, Pheonix, AZ: April 2018.
2. Bahmani, Cynthia. "Rotate and Reciprocate: exploring rotational and reciprocal movement on the CoreAlign." Cynthia Bahmani Pilates, San Francisco, CA: 24 October, 2021.
3. Blumenfield, Hal. *Neuroanatomy through Clinical Cases*. 2nd ed., Sinauer Associates, 2010.
4. Breland, Mariska. "Tight AF: Tips for working with tightness, tone & spasticity." *The Neuro Studio*, 29 Aug. 2022. Lecture (online).
5. Breland, Mariska. *Pilates for MS: Pilates-Based Exercises for Multiple-Sclerosis*. 3rd ed., 2013.
6. Calais-Germain, Blandine. *Anatomy of Movement*. Revised edition, Eastland Press, 2014.
7. Comella, Stephanie, and St. Francis, Theo. *From the Ground Up: a Human-Powered Framework for Spinal Cord Injury Recovery*. 2020.
8. Franklin, Eric N. *The Art & Science of Cueing: Best Cueing Practices for Successfully Teaching Yoga, Pilates and Dance*. OPTP, 2016.
9. Galmarini, Taylor. "Pilates for Neurological Conditions" 3-day workshop. The Neuro Studio/Mariska Breland, Sonoma, CA: Feb 2020.
10. Gatt R, Vella Wood M, Gatt A, Zarb F, Formosa C, Azzopardi KM, Casha A, Agius TP, Schembri-Wismayer P, Attard L, Chockalingam N, Grima JN. Negative Poisson's ratios in tendons: An unexpected mechanical response. *Acta Biomater*. 2015 Sep;24:201-8. doi: 10.1016/j.actbio.2015.06.018. Epub 2015 Jun 20. PMID: 26102335.
11. Gracovetsky, Serge. Non Invasive Assessment of Spinal Function, YouTube, 19 Dec. 2012, <https://www.youtube.com/watch?v=EAMK7yR9RgI>. Accessed 25 Apr. 2023.
12. Graham, Lisa. "Finding Center: Midline activation for Movement Efficiency on the CoreAlign." *Balanced Body's Pilates on Tour*, Monterey, CA: 11 Feb 2023.
13. Hackney, Peggy. *Making Connections: Total Body Integration through Bartenieff Fundamentals*. Routledge, 2022.
14. Hartman, Anna. "Autonomic Nervous System and The Polyvagal Theory." *MovementREV Mentorship*, 22 March 2020. Lecture (online).
15. Hartman, Anna. "Breathing Mechanics and Assessment and Practical Application." *MovementREV Mentorship*, 5 April 2020. Lecture (online).
16. Hartman, Anna. "The 'Ceptions'." *MovementREV Mentorship*, 29 March 2020. Lecture (online).
17. Hartman, Anna. "Erb's Point of the Neck." *MovementREV*, 28 Oct. 2022, <https://www.movementrev.com/blog-pods/erbs-point-of-the-neck>. Blog.
18. Hartman, Anna. "Fascial Tensegrity Movement Implications." *MovementREV Mentorship*, 26 April 2020. Lecture (online).
19. Hartman, Anna. "Lacking Upward Rotation of the Scapula?." *MovementREV*, 18 Oct. 2019, <https://www.movementrev.com/blog-pods/2019/10/18/lacking-upward-rotation-of-the-scapula>. Blog.
20. Hartman, Anna. "Prop It like It's Hot- Why Props Should Be Your BFF." *MovementREV*, 28 Oct. 2022. <https://www.movementrev.com/blog-pods/2019/8/4/prop-it-like-its-hot-why-props-should-be-your-bff>. Blog.
21. Hartman, Anna. "Visceral and Neural Considerations in Assessment." *MovementREV Mentorship*, 24 May 2020. Lecture (online).
22. Hoffman, Jonathan. *CoreAlign 1 Foundations: a detailed guide for teaching CoreAlign*. 3rd ed, Balanced Body, Inc., 2015.
23. James, Earls, and Thomas Myers. *Fascial Release for Structural Balance*. North Atlantic Books, 2010.
24. La Nuit, Isabella. *Floorwork: A Basic Sequence in Big X (Bartenieff Fundamentals)*, YouTube, 1 Mar. 2022, <https://www.youtube.com/watch?v=CXQDxV33j0Q>. Accessed 25 Apr. 2023.
25. Marlien, Eric. *New Approach to the Vagus Nerve and the Autonomic Nervous System*. Barral Productions, 2021.
26. McEntire, Trent. "Neuro-Movement for Pilates Teachers" 2-day Workshop. McEntire Pilates. April 2018.
27. Meaden, Jeanice and Reber, Madeleine. "Bartenieff Fundamentals: a somatic approach to fluid dynamic expression" 2-day workshop. Laban/Bartenieff Institute of Movement Studies, Chicago, IL, 25-26 March 2017.
28. Monsalve, Alejandra. "NeuroKinetic Pilates Method SCI Recovery Program" 4-day workshop. Cota Pilates. South Lake Tahoe, CA: 8-11 Sept 2014.
29. Moose, Claudia. Johns, Louise. "Primal Foundations" 2-day workshop. *Primal Movements WORKS!*, Feb. 2017.
30. Myers, Thomas W. *Anatomy Trains*. Churchill Livingstone/Elsevier, 2014.
31. Prettyman, Marie-Claire. *Opposition in Pilates and Yoga: Newton's Third Law Meets Mindfulness*. Panoma Press Ltd, 2016.
32. Rosenberg, Stanley. *Accessing the Healing Power of the Vagus Nerve*. North Atlantic Books, 2017.
33. "Spasticity Management for Spinal Cord Injury." *Mayo Clinic*, Mayo Foundation for Medical Education and Research, 30 Apr. 2022, <https://www.mayoclinic.org/tests-procedures/spasticity-management/about/pac-20395011>.
34. Saliba, Vicky, et al. "Proprioceptive Neuromuscular Facilitation." *Radial Manual Therapy*, edited by Richard E. Nyberg, Williams & Wilkins, Philadelphia, PA, 1992, pp. 243-283.
35. St. John, Nora. *Chair: a detailed guide for teaching chair*. Balanced Body, Inc., 2009.
36. St. John, Nora. *Mat 1: a detailed guide for teaching Pilates*. Balanced Body, Inc., 2007.
37. St. John, Nora. *Reformer 1: a detailed guide for teaching pilates*. Balanced Body, Inc., 2007.
38. St. John, Nora. *Trapeze Table: a detailed guide for teaching pilates*. 3rd ed, Balanced Body, Inc., 2007.
39. Wang, D. "Reticular Formation and Spinal Cord Injury." *Nature News*, Nature Publishing Group, 26 Aug. 2008, <https://www.nature.com/articles/sc2008105>.
40. Young Vincent. *Embodied Laban/Bartenieff Fundamentals*, YouTube, 6 May 2016, <https://www.youtube.com/watch?v=9iijoJv-33E+of+cueing>. Accessed 25 Apr. 2023.