

# WORKING WITH SPINAL CORD INJURY:

A Framework for Exercise Selection & Execution  
*3-Day (22 hour) In-Person Professional Course*

It can be overwhelming to work with individuals with spinal cord injury (SCI) and other forms of paralysis/parasthesia due to the wide impact of the injury on 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 course, participants will apply concepts directly with Client Demo Models 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 learn a new movement analysis system and exercises appropriate for cervical-level and thoracic-level SCI clients, while empowering movement curiosity and confidence for sustainable training programs.

Course Description

## Learning Objectives

### Participants will learn:

- Our Framework for Recovery and how to re-connect clients to their paralyzed areas in an organized progression.
- A movement analysis system that quickly highlights disconnects.
- How to apply fascial science and connective tissue chains in programs to build trunk stability, hip stability, and efficient gait patterns.
- Floor-based exercises & progressions to use in clinical setting and to assign as home exercises.
- Pilates principles and Bartenieff Fundamentals which ask for full body integration in every exercise.
- Coaching cues (inputs) for quick changes in performance (outputs).
- How to optimize equipment to offer kinesthetic feedback for faster 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

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

# Continuing Education

This 3-day Course offers  
**22 CONTINUING EDUCATION HOURS**

This course is **APPROVED BY:**



**National Pilates  
Certification  
Program (NPCP)**



in:  
**California  
Oklahoma  
Ohio (19.5 units)**  
*pending: Arizona*



in:  
**Oklahoma**

For other fitness  
accreditation boards  
(**ACSM, NASM, ACE, ESSA**)  
**and state PTAs:**  
Submit the course syllabus  
+ your Certificate of  
Completion directly with  
your board to petition for  
credits.

## Registration

Find upcoming courses & registration  
portals through our website,  
[zebrafishneuro.com/trainings](https://zebrafishneuro.com/trainings)



## Pre-Course Work

**ONE hour of continuing education is  
credited to pre-course material.**

### Framework For Recovery

We will quickly review the core concepts of our 'Framework  
for Recovery' with the assumption that you have already  
been exposed to the concepts through the pre-course  
material.

Option 1

**Reading: *From the Ground Up*, Chapters 6-10**

Option 2

**Listening: FTGU Book Club Podcasts, Episodes 6-10**



## Program Beliefs & Values

To better understand our approach to SCI recovery and  
programming, we have outlined our Core Beliefs and Core  
Values in a 40-minute podcast episode.

**Listening: *ZN In Conversation*, Season 2 Episode 2**



# Day 1

## Applied Systems & ZN Framework for Recovery

**Day 1 introduces the four applied systems used in the Zebrafish Neuro approach.** Participants experience each of these through discussion & personal movement experiences:

- The three components of the motor development progression (MDP)
- The six fascial lines and how to access them through position and movement.
- Pilates inspired cueing for deeper integration, and pilates-inspired exercises using bands and sliders to feel the quick learning effect of kinesthetic feedback.
- Movement generation concepts and rolling drills inspired by Bartenieff Fundamentals.



# Day 2

## Programming for Cervical & High Thoracic SCI

**On Day 2, participants apply concepts from Day 1 with Client Demo Models during hands-on lab:**

- Movement analysis for strength & dynamics of the shoulder complex.
- Programming considerations and exercise selection to meet the needs & challenges of upper-extremity and trunk impaired neuro clients.
- How to leverage fascial lines to develop trunk stability.
- 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

## Programming for Thoracic SCI

**On Day 3, participants continue to apply concepts with advanced Client Demo Models during hands-on lab:**

- Movement analysis for 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.

See the following pages for an in-depth time-table of each day's modules.



## About the Course Creator & Presenter

*Stephanie Comella*

**B.S. Exercise Biology from UC Davis, 2011  
Nationally Certified Pilates Teacher (NCPT)**

Stephanie Comella has engaged in over 30,000 hours working directly with individuals with spinal cord injury and other neurological disorders since 2011. She blends her formal education in movement science, Pilates and other mindful movement modalities with neurological science to provide an intuitive, hands-on style of teaching focused on body re-connection.

Stephanie graduated from the University of California, Davis in 2011 with a B.S. in Exercise Biology. She studied sports medicine and exercise-based rehabilitation as an intern with the university's Division I athletes. After graduation in 2011, Stephanie worked for a spinal cord injury & neurological disorder activity-based therapy facility in Pleasanton, CA for four years.

She was first introduced to Pilates in 2014, where she attended a workshop presented by Alejandra Monsalve of Body Wellness Hawaii, which forever changed her thinking about spinal cord injury rehabilitation. Stephanie quickly transitioned to this new model and started a pilates-based SCI recovery program at Absolute Center in Lafayette, CA in 2015.

She opened her own practice in 2020, working one-on-one with individuals with SCI and other neurological conditions both virtually and at her private studio located in Bend, Oregon.

Stephanie formally created Zebrafish Neuro with client-turned-business partner Theo St. Francis (C6 incomplete SCI) in 2017 to consolidate formal research and clinical findings into a 300-page text, From the Ground Up. Stephanie now teaches courses to neuro rehab and exercise professionals all over the world.

Refer to the following pages for a full CV.



Due to the extensive hands-on learning components of this course, we maintain a strict **student to faculty ratio of 16:1** to provide a high-touch learning experience. Courses are capped 16 participants, or a Course/Lab Assistant is added to the course for 16+ participants.

## About the Course/Lab Assistant (CLA)

*Taylor Gafmarini*

**B.S. Biomedical Sciences, Doctorate of Physical Therapy (DPT),  
Neurological Clinical Specialist (NCS), Nationally Certified Pilates  
Teacher (NCPT), Integrative Nutrition Health Coach**

Tay has been implementing the ZN approach with her inpatient, outpatient, and in-home patients since 2023 and has supported Stephanie as a CLA in two courses since her initial introduction to the material. She was the lead PT trainer and in-service provider on Pilates equipment in Shepherd Center's Beyond Therapy (activities based therapy department) and Multiple Sclerosis Rehab & Wellness department. Tay is a hands on lab assistant for UMiami and Mercer University DPT programs as well as a clinical instructor for their PT students. Tay currently resides in Atlanta, GA as a home concierge Neuro PT and Pilates teacher.

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**Working with Spinal Cord Injury: A Framework for Exercise Selection & Execution**  
3-day (22-hour) Level 1 In-Person Professional Course

**Name:**

**Course Dates:**

**1.) What are the (superior) access portals for each fascial line?**

- Spiral Line:
- Functional line:
- Deep line:
- Lateral line:
- Superficial Front Line:
- Back line:

**2.) How is fascia a uniquely different elastic tissue from muscles?**

**3.) What does this do for our form?**

**4.) In what types of clients (high tone or low-tone) would we want to leverage this property?**

**5.) What are the three components to the MDP, and what does each one offer for development?**

- 1.
- 2.
- 3.

**6.) List out 3 different rolling (supine to prone) pathways:**

- 1.
- 2.
- 3.

**7.) List out the Drills progression, and give an example exercise for someone in Quadruped:**

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

**8.) What are the 5 considerations in set-up for banded arm and/or leg work?**

- 1.
- 2.
- 3.
- 4.
- 5.

**9.) According to the ZN Framework for Recovery, “Connection” exercises are classified as:**

**10.) and “Integration/Pattern” exercises are classified as:**

**11.) Why might you introduce an “Integration” exercise before a “Connection” exercise?**

**12.) Create a lesson plan using the ZN Framework and junctions on the next page:**



# Zebrfish Neuro Session Program

Created for: \_\_\_\_\_

Include 1-2 exercises per category with any specific set-up notes, variations and cues you found to be helpful.

*Exercise*

*Set-up Notes, Cueing & Progressions*

## **ST Awareness & Connection**

**supine:** high repetition, open-chain(-ish) exercises

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## **LP Awareness & Connection**

**supine:** pelvic exploration

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## **ST + T-SPINE (+ LP) Integration**

**seated:** spine articulation & pelvic anchoring

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## **HIP Awareness & Connection**

**supine, side, seated:** LP stability + active hip/leg movements

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## **ST + T-SPINE + LP + HIP Integration**

**supine, quadruped, kneeling:** weight-bearing, closed-chain

Home exercise program / homework exercises:



## Certificate of Completion

*This certificate is presented to*

**JANE DOE**

*in recognition for successfully completing*

## Working with Spinal Cord Injury Clients: A Framework for Exercise Selection & Execution

(Level 1, 3-day course)

on [dates of course]  
at [location of course]

### 22 CONTACT HOURS OF CONTINUING EDUCATION

#### OKLAHOMA PTA

This course has been approved  
for 22 CEUs #20-1273585

#### CALIFORNIA PTA

This course has been approved  
for 2.2 CEUs by CPTA #24-108



22 CECS #29690-5969

A handwritten signature in black ink that reads "Stephanie Comella".

**STEPHANIE COMELLA**  
NCPT, Zebrafish Neuro Educator

**Working with Spinal Cord Injury: A Framework for Exercise Selection & Execution**  
3-day (22-hour) Level 1 In-Person Professional Course

**Which sections did you find the most relevant and/or helpful to your work & clinical setting?**

|                                          |                                         |
|------------------------------------------|-----------------------------------------|
| Applied systems: MDP                     | NOT AT ALL / SOMEWHAT / VERY APPLICABLE |
| Applied systems: Pilates                 | NOT AT ALL / SOMEWHAT / VERY APPLICABLE |
| Applied systems: Fascial lines           | NOT AT ALL / SOMEWHAT / VERY APPLICABLE |
| Applied systems: Bartenieff Fundamentals | NOT AT ALL / SOMEWHAT / VERY APPLICABLE |
| ZN Framework for Recovery & Junctions    | NOT AT ALL / SOMEWHAT / VERY APPLICABLE |
| "Soft skills:" Empowerment & Cueing      | NOT AT ALL / SOMEWHAT / VERY APPLICABLE |
| Cervical SCI Day                         | NOT AT ALL / SOMEWHAT / VERY APPLICABLE |
| Thoracic SCI Day                         | NOT AT ALL / SOMEWHAT / VERY APPLICABLE |

**What do you wish we could have expanded on/spent more time on during the weekend?**

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**What sections/content do you think we could have spent less time on (or even omitted)?**

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**Please rate following learning materials/presentation styles on how they helped your learning & understanding of the material:**

|                                                   |                                       |
|---------------------------------------------------|---------------------------------------|
| Pre-Course Work: ZN Podcast & FTGU Reading        | NOT HELPFUL / SOMEWHAT / VERY HELPFUL |
| Lecture support: posters and/or powerpoint        | NOT HELPFUL / SOMEWHAT / VERY HELPFUL |
| Video examples from Steph's clients               | NOT HELPFUL / SOMEWHAT / VERY HELPFUL |
| Printed Guidebook: Lecture Notes                  | NOT HELPFUL / SOMEWHAT / VERY HELPFUL |
| Printed Guidebook: Exercise photos/descriptions   | NOT HELPFUL / SOMEWHAT / VERY HELPFUL |
| Printed Guidebook: Blank spaces to fill in        | NOT HELPFUL / SOMEWHAT / VERY HELPFUL |
| Printed Guidebook: Lab guides & reflections       | NOT HELPFUL / SOMEWHAT / VERY HELPFUL |
| Watching demonstrations: Steph w/ clients         | NOT HELPFUL / SOMEWHAT / VERY HELPFUL |
| Lab time: practice with demo clients              | NOT HELPFUL / SOMEWHAT / VERY HELPFUL |
| Personal movement experiences: feeling concepts   | NOT HELPFUL / SOMEWHAT / VERY HELPFUL |
| Group lesson plans & presentations                | NOT HELPFUL / SOMEWHAT / VERY HELPFUL |
| Daily TFRs                                        | NOT HELPFUL / SOMEWHAT / VERY HELPFUL |
| Collaborating with other attendees                | NOT HELPFUL / SOMEWHAT / VERY HELPFUL |
| Collaborations and sidebars with Course Assistant | NOT HELPFUL / SOMEWHAT / VERY HELPFUL |

**Do you have any suggestions for improving the general course design/order of experience during Lab time?**

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**What other materials/pre-course work would have been helpful for your learning or delivery of the material?**

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**Course Location & Date:** \_\_\_\_\_**Logistics and Venue**

How well did I communicate logistics with you prior and during the course?

NO COMMUNICATION / NOT WELL / VERY WELL

How well do you feel the hosting venue accommodated the course?

NOT VERY WELL / SOMEWHAT / VERY WELL

*What did you enjoy about the hosting venue/what would you have wanted to have available at this venue?*

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**Did the course meet your expectations? Was there anything you thought you were going to learn, but didn't?**

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**Were the Course Objectives met?**

Scan the code to read the Course Objectives.



☐ Yes

☐ No

**Was a commercial product promoted?**

☐ Yes

☐ No

*If yes, did you feel that product promotion was the sole purpose of the course?*

☐ Yes

☐ No

**Was evidence provided to substantiate the material provided?**

☐ Yes

☐ No

**Was anecdotal evidence the primary source of information (vs. evidence-based)?**

☐ Yes

☐ No

**How can I support you post-course?**

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**What curriculum would you live to see in a 'Level 2' course?**

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**Do you plan to attend the quarterly Course Alumni Office Hours?**

☐ Yes

☐ No

☐ Maybe

**Anything else you would like to add?**

If you feel inclined, I would love to hear your genuine testimonial about the course to share with our community.

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**Name (optional)** \_\_\_\_\_

**Exercise Physiologist**

**Physical Therapist**

**Occupational Therapist**

**Pilates**

**Other:**

*Thank you!*

## DAY 1: Applied Systems & ZN Framework for Recovery

| Start                | Duration       | Topic                                                                                        | Format                                            |
|----------------------|----------------|----------------------------------------------------------------------------------------------|---------------------------------------------------|
| <b>INTRO</b>         |                |                                                                                              |                                                   |
|                      | <b>1:08:00</b> |                                                                                              |                                                   |
| 9:00 a               | 0:30:00        | Welcome, Housekeeping, Introductions & Learning Goals                                        | DISCUSSION                                        |
| 9:30 a               | 0:05:00        | Course Agenda                                                                                | LECTURE                                           |
| 9:35 a               | 0:10:00        | Tips for a successful Weekend                                                                | LECTURE                                           |
| 9:45 a               | 0:05:00        | ZN Core Beliefs & Values: summary                                                            | LECTURE                                           |
| 9:50 a               | 0:18:00        | Applied Systems: Overview                                                                    | LECTURE                                           |
| 10:08 a              | 0:02:00        | <b>MOVE BREAK</b>                                                                            |                                                   |
| <b>MDP</b>           |                |                                                                                              |                                                   |
|                      | <b>1:10:00</b> |                                                                                              |                                                   |
| 10:10 a              | 0:15:00        | MDP: Components - positions, travels, transitions                                            | LECTURE                                           |
| 10:25 a              | 0:45:00        | MDP: Movement experience                                                                     | GUIDED EXPERIENCE/LAB                             |
| 11:10 a              | 0:10:00        | MDP: Review of progressions                                                                  | DISCUSSION                                        |
| 11:20 a              | 0:05:00        | <b>BIO BREAK</b>                                                                             |                                                   |
| 11:25 a              | 0:15:00        | MDP: Video examples                                                                          | LECTURE                                           |
| 11:40 a              | 0:20:00        | MDP: Drills progression                                                                      | LECTURE & GUIDED EXPERIENCE                       |
| 12:00 p              | 0:05:00        | <b>GROUP PHOTO</b>                                                                           |                                                   |
| 12:05 p              | 1:00:00        | <b>LUNCH (incl.15 min Q&amp;A/play time)</b>                                                 |                                                   |
| 1:05 p               | 0:05:00        | <b>POST-LUNCH:</b> deep line/visceral masage                                                 | GUIDED EXPERIENCE                                 |
| <b>FASCIA LINES:</b> |                |                                                                                              |                                                   |
|                      | <b>1:15:00</b> |                                                                                              |                                                   |
| 1:10 p               | 1:00:00        | Fascial Lines: Theraband wrapping/access portals + feeling the lines in whole body action    | LECTURE w/ DEMO + GUIDED EXPERIENCE + PARTNER LAB |
| 2:10 p               | 0:10:00        | Fascial Lines: Auxetic properties                                                            | LECTURE                                           |
| 2:20 p               | 0:05:00        | Fascial Lines: reading FTGU                                                                  | LECTURE                                           |
| <b>PILATES</b>       |                |                                                                                              |                                                   |
|                      | <b>1:50:00</b> |                                                                                              |                                                   |
| 2:25 p               | 0:10:00        | Pilates: Values of pilates for SCI (cueing, movement foundations, nuance/quality, equipment) | LECTURE                                           |
| 2:35 p               | 0:45:00        | Pilates: EXPERIENCE w/ anchored bands                                                        | GUIDED EXPERIENCE/LAB                             |
| 3:20 p               | 0:05:00        | Pilates: TFRs & offerings                                                                    | DISCUSSION                                        |
| 3:25 p               | 0:35:00        | Suspension: leg springs DEMO & partner lab (15 min ea)                                       | DEMO & PARTNER LAB                                |
| 3:20 p               | 0:15:00        | Dynamic feedback: Hip Hinge experience lab x2 (7 min ea)                                     | GUIDED EXPERIENCE/LAB                             |
| 3:35 p               | 0:05:00        | <b>BIO BREAK</b>                                                                             |                                                   |
| <b>FRAMEWORK</b>     |                |                                                                                              |                                                   |
|                      | <b>0:35:00</b> |                                                                                              |                                                   |
| 3:40 p               | 0:20:00        | Framework: Overview                                                                          | LECTURE                                           |
| 4:00 p               | 0:15:00        | Junctions: Overview & Experience                                                             | LECTURE & GUIDED EXPERIENCE                       |
| <b>EMPOWER</b>       |                |                                                                                              |                                                   |
|                      | <b>0:35:00</b> |                                                                                              |                                                   |
| 4:15 p               | 0:05:00        | Cervical: Junctions, FW & Considerations                                                     | LECTURE                                           |
| 4:20 p               | 0:30:00        | Vulnerability in Cervical & OPTIMAL Theory                                                   | LECTURE & DISCUSSION                              |
| <b>CLOSING</b>       |                |                                                                                              |                                                   |
|                      | <b>0:10:00</b> |                                                                                              |                                                   |
| 4:50 p               | 0:10:00        | TFRs & Wrap                                                                                  | DISCUSSION                                        |
| 5:00 p               |                | <b>DONE</b>                                                                                  |                                                   |

| DAY 2: Programming for Cervical & High Thoracic SCI |          |                                                          |                                  |
|-----------------------------------------------------|----------|----------------------------------------------------------|----------------------------------|
| Start                                               | Duration | Topic                                                    | Format                           |
| <b>GREETINGS</b>                                    |          | <b>0:10:00</b>                                           |                                  |
| 9:00 a                                              | 0:10:00  | Good Morning, TFRs & preview of day's content (rolling!) | DISCUSSION                       |
| <b>BARTENIEFF</b>                                   |          | <b>1:00:00</b>                                           |                                  |
| 9:10 a                                              | 0:25:00  | BF Concepts: BESS & Relationships                        | LECTURE                          |
| 9:35 a                                              | 0:30:00  | BF Experience: different strategies for rolling          | GUIDED EXPERIENCE/LAB            |
| 10:05 a                                             | 0:05:00  | BF Experience: TFRs & Discussion                         | DISCUSSION                       |
| <b>ST JUNCTION</b>                                  |          | <b>2:20:00</b>                                           |                                  |
| 10:10 a                                             | 0:40:00  | ST Junction: Awareness (anatomy) & Experience            | LECTURE + GUIDED EXPERIENCE/LAB  |
| 11:10 a                                             | 0:05:00  | <b>BIO BREAK</b>                                         |                                  |
| 10:50 a                                             | 0:15:00  | Supine ST: Pushing/SA Experience                         | GUIDED EXPERIENCE                |
| 11:15 a                                             | 0:15:00  | TRAINER SPOTTING: Supine ST: Pushing/SA                  | DEMO & PARTNER LAB               |
| 11:05 a                                             | 0:05:00  | Supine ST: Pulling/Lats Experience                       | GUIDED EXPERIENCE                |
| 11:15 a                                             | 0:15:00  | TRAINER SPOTTING: supine knees                           | DEMO & PARTNER LAB               |
| 11:30 a                                             | 0:15:00  | Supine ST/Spine: 3D Thorax DEMO & partner lab            | DEMO & PARTNER LAB               |
| 11:45 a                                             | 0:15:00  | Prone ST: Elbow prop DRILLS PROGRESSION                  | GUIDED EXPERIENCE/LAB            |
| 12:00 p                                             | 0:15:00  | Side ST: Elbow prop DRILLS PROGRESSION                   | GUIDED EXPERIENCE/LAB            |
| 12:15 p                                             | 1:00:00  | <b>LUNCH (incl.15 min Q&amp;A/play time)</b>             |                                  |
| 1:15 p                                              | 0:05:00  | <b>POST-LUNCH:</b> BF Concepts: partnering               | GUIDED EXPERIENCE + PARTNER LAB  |
| 1:20 p                                              | 0:05:00  | Cervical: Starting Place & Discovery                     | LECTURE                          |
| <b>CLIENT LABS</b>                                  |          | <b>3:05:00</b>                                           |                                  |
| 1:25 p                                              | 0:20:00  | Transitions: Rolling DRILLS                              | DEMO + HANDS-ON CLIENT LAB       |
| 1:45 p                                              | 0:15:00  | Transitions: Rolling                                     | DEMO + HANDS-ON CLIENT LAB       |
| 2:00 p                                              | 0:15:00  | Supine ST: Pressing/SA                                   | DEMO + HANDS-ON CLIENT LAB       |
| 2:15 p                                              | 0:10:00  | Supine ST: Pulling/Lats                                  | DEMO + HANDS-ON CLIENT LAB       |
| 2:25 p                                              | 0:10:00  | Supine ST/Spine: 3D Thorax                               | DEMO + HANDS-ON CLIENT LAB       |
| 2:35 p                                              | 0:15:00  | Transitions: to Prone                                    | DISCUSSION + HANDS-ON CLIENT LAB |
| 2:50 p                                              | 0:15:00  | Prone ST: Elbow Prop (+) drills progression              | DEMO + HANDS-ON CLIENT LAB       |
| 3:05 p                                              | 0:15:00  | Transitions: to Side prop DRILLS                         | DEMO + HANDS-ON CLIENT LAB       |
| 3:20 p                                              | 0:20:00  | Side Prop ST: Elbow prop drills progression (10 ea)      | DEMO + HANDS-ON CLIENT LAB       |
| 3:40 p                                              | 0:20:00  | Transitions: to seated                                   | DEMO + HANDS-ON CLIENT LAB       |
| 4:00 p                                              | 0:15:00  | Seated ST+T-Spine Exercises: Front, Back & Side Prop     | DEMO + HANDS-ON CLIENT LAB       |
| 4:15 p                                              | 0:10:00  | Seated ST+T-Spine Exercises: Waterskier                  | DEMO + HANDS-ON CLIENT LAB       |
| 4:25 p                                              | 0:05:00  | <b>WRAP UP LAB &amp; THANK MODELS</b>                    |                                  |
| <b>CLOSING</b>                                      |          | <b>0:30:00</b>                                           |                                  |
| 4:30 p                                              | 0:25:00  | Group Session Plans                                      | ASSESSMENT                       |
| 4:55 p                                              | 0:05:00  | TFRs & Wrap                                              | DISCUSSION                       |
| 5:00 p                                              |          | <b>DONE</b>                                              |                                  |

| <b>DAY 3: Programming for Thoracic SCI</b> |          |                                                  |                            |
|--------------------------------------------|----------|--------------------------------------------------|----------------------------|
| Start                                      | Duration | Topic                                            | Format                     |
| <b>GREETINGS</b>                           |          | <b>0:15:00</b>                                   |                            |
| 8:00 a                                     | 0:10:00  | Good Morning, TFRs & preview of day's content    | DISCUSSION                 |
| 8:10 a                                     | 0:05:00  | Thoracic: Junctions, FW & Considerations         | LECTURE                    |
| <b>LP JUNCTION</b>                         |          | <b>2:15:00</b>                                   |                            |
| 8:15 a                                     | 0:10:00  | LP: Awareness & Connection                       | LECTURE                    |
| 8:25 a                                     | 0:30:00  | Movement Experience: LP exploration & anchoring  | GUIDED EXPERIENCE/LAB      |
| 8:55 a                                     | 0:05:00  | Thoracic: Starting Place & Discovery             | LECTURE                    |
| <b>DEMONSTRATION</b>                       |          | <b>0:55:00</b>                                   |                            |
| 9:00 a                                     | 0:05:00  | Thoracic Observation: Client Profile Review      | LECTURE                    |
| 9:05 a                                     | 0:50:00  | Thoracic SCI Client Session Observation          | DEMONSTRATION              |
| 9:55 a                                     | 0:05:00  | <b>BIO BREAK</b>                                 |                            |
| <b>CUEING</b>                              |          | <b>0:15:00</b>                                   |                            |
| 10:00 a                                    | 0:15:00  | Cues for Deeper Integration                      | LECTURE & DISCUSSION       |
| <b>CLIENT LABS</b>                         |          | <b>1:25:00</b>                                   |                            |
| 10:15 a                                    | 0:20:00  | *Check the boxes*: Supine, Prone, Side           | HANDS-ON CLIENT LAB        |
| 10:35 a                                    | 0:15:00  | *Check the boxes*: 3D Thorax                     | HANDS-ON CLIENT LAB        |
| 10:50 a                                    | 0:15:00  | LP: Awareness & Connection                       | LECTURE                    |
| 11:05 a                                    | 0:05:00  | Seated: Integration                              | DEMONSTRATION              |
| 11:25 a                                    | 0:15:00  | Seated: Integration (360 core bands)             | DEMO + HANDS-ON CLIENT LAB |
| 11:40 a                                    | 0:15:00  | Seated: Integration (pelvic anchoring)           | DEMO + HANDS-ON CLIENT LAB |
| 11:55 a                                    | 0:05:00  | <b>FEEDBACK FORM</b>                             |                            |
| 12:30 p                                    | 1:00:00  | <b>LUNCH (incl.15 min Q&amp;A/play time)</b>     |                            |
| 12:30 p                                    | 0:10:00  | Facilitating New Connections Progression         | LECTURE                    |
| 12:40 p                                    | 0:20:00  | HIP: Awareness (anatomy & compensation patterns) | LECTURE                    |
| 1:00 p                                     | 0:15:00  | Suspension: Supine Leg springs                   | HANDS-ON CLIENT LAB        |
| 1:15 p                                     | 0:20:00  | Suspension: Side Leg springs                     | DEMO + HANDS-ON CLIENT LAB |
| 1:35 p                                     | 0:15:00  | Hip Integration: HTFR Experience                 | GUIDED EXPERIENCE/LAB      |
| 1:50 p                                     | 0:15:00  | Hip Integration: HTFR                            | DEMO + HANDS-ON CLIENT LAB |
| 2:05 p                                     | 0:20:00  | Hip Integration: Bridging                        | DEMO + HANDS-ON CLIENT LAB |
| 2:25 p                                     | 0:15:00  | Hip Integration: Quadruped                       | HANDS-ON CLIENT LAB        |
| 2:40 p                                     | 0:20:00  | Hip Integration: Low Kneeling                    | DEMO + HANDS-ON CLIENT LAB |
| 3:00 p                                     | 0:20:00  | Hip Integration: Advanced Kneeling               | DEMO + HANDS-ON CLIENT LAB |
| 3:20 p                                     | 0:05:00  | <b>WRAP UP LAB &amp; THANK MODELS</b>            |                            |
| <b>CLOSING</b>                             |          | <b>0:35:00</b>                                   |                            |
| 3:25 p                                     | 0:25:00  | Group Session Plans                              | ASSESSMENT                 |
| 3:50 p                                     | 0:10:00  | TFRs & Wrap                                      | DISCUSSION                 |
| 4:00 p                                     |          | <b>DONE</b>                                      |                            |

# STEPHANIE COMELLA, NCPT

**ZEBRAFISH**  
NEURO

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## EDUCATION

**2007-2011** University of California, Davis — B.S. Exercise Biology

## CERTIFICATIONS

**2016** Balanced Body Comprehensive Pilates Teacher certification program

**2017 - PRESENT** National Certified Pilates Teacher (NCPT) #15481

**2008 - PRESENT** American Red Cross: Adult CPR/AED

**2008 - 2020** American Council on Exercise: Group Exercise Instructor

## WORK EXPERIENCE

**2017 - PRESENT** Co-founder, President, Lead Educator and Lead Trainer

*Comella Wellness Coaching DBA Zebrafish Neuro in Bend, OR*

- Co-authored 300-page text on SCI rehab strategies based on clinical experiences and the latest research on neuroplasticity, motor development, motor learning and the pilates method.
- Create and produce educational curriculum for online and in-person courses/workshops
- Direct effective movement programs for in-person & remote clients (fluctuates between 10-20 weekly appointments) of varying abilities/injuries
- Support individuals with spinal cord injury in their on-going rehabilitation efforts with floor-based movement programs
- Create at-home recovery programs for individuals with spinal cord injuries to implement on their own
- Consult with movement professionals and physical therapists on client cases

**2015 - 2020** Pilates & fitness instructor

*Absolute Center in Lafayette, CA - pilates studio for diverse populations*

- Coordinated 1:1 and group sessions in effective and challenging pilates and fitness programs for a variety of clientele
- Devised and executed staff training to better serve people with disabilities and create a more inclusive space at the studio
- Lead for Absolute Endeavor, a program consisting of four pilates teachers specializing in SCI programming.

**2011 - 2015** Manager & Neuro Recovery Specialist

*SCI-FIT in Pleasanton, CA - personal training & activity-based therapy for individuals with neurological conditions*

- Implement effective rehab programs focused on strength, gait development, and functional movement
- Supervised team of 10 staff and implemented training quality standards
- Coordinated and implemented staff development/training
- Created employee training handbook for on-boarding & initial training on SCI rehab programs

**2009 - 2011** Student Athletic Training Intern

*UC Davis Athletic Department in Davis, CA - rehab & sports performance for D1 University athletes*

- Implement rehab programs with university's Division I athletes, supervised by Certified Athletic Trainers
- First Responder for athletes during games and practices

## **PUBLICATIONS TEXTS**

**2025** Contributing author for *Pilates for Health Conditions*. Handspring Publishing: *expected publishing in 2025*.

**2024** Guest writer for Ryan Shazier Foundation: [Non-Traditional Modalities for SCI Recovery and Wellness](#)

**2020** Co-Author of *From the Ground Up: A Human-Powered Framework for Spinal Cord Injury Recovery*. Self-Published, 2020.

**2013** "SCI-FIT Employee Training Handbook" (text manual). SCI-FIT, 2013

## **PRESENTATIONS**

### **"Working with Spinal Cord Injury: A Framework for Exercise Selection & Execution"**

*22 hour in-person course*

**2023, May** Spiral Spine in Nashville, TN

**2023, Oct** Northern Beaches Rehab in Narrabeen, NSW (Australia)

**2023, Nov** C.O.R.E. in Orlando, FL

**2024, Feb** Movement Med in Chicago, IL

**2024, March** Re-Yu Paralysis Center in Edmonton, AB (Canada)

**2024, Oct** Sporting Wheelies in Brisbane, QLD (Australia)

**2024, Dec** Integris Health in Oklahoma City, OK

**2025, March** ADAPT Functional Movement Center in Carlsbad, CA

### **"Working with High Tone Neuro Clients"**

*7-hour in-person course*

**2024, April** SCI-FIT in Sacramento, CA

**2024, Oct** Sargood in Sydney NSW, Australia

**2024, Nov** Optimum Health Solutions in Liverpool, NSW Australia

**2024, Nov** The Perfect Step in Pomona, CA

**2025, March** Institut de réadaptation Gingras-Lindsay in Montreal, Canada

### **"Working with High Tone Neuro Clients"**

*4-hour remote presentation*

**2023, Jan** NeuroMoves/SCIA National Conference in Australia

**2024, Sept** Zebrafish Neuro Community

**2024, Nov** Rope Neuro in Auckland, NZ

### **"Optimizing Pilates Equipment for Neuro Clients"**

*7-hour in-person course*

**2024, June & Nov** The Perfect Step in Pomona, CA

### **"Floor-Based Exercises & Progressions for Neuro"**

*7-hour in-person course*

**2024, June** The Perfect Step in Pomona, CA

**2024, Nov** Optimum Health Solutions in Liverpool, NSW Australia

### **"The Art & Science of Cueing"**

*4-hour remote presentation*

**2024, July** Optimum Health Solutions in Liverpool, NSW Australia

### **"Working with individuals with disabilities"**

*2-hour remote presentation*

**2022, April** Balanced Body Pilates on Tour

**2023, Nov** Advanced Movement Principles, special populations

### **Keynote speaker**

**2022, April** Balanced Body Pilates on Tour

**2020** Virtual is the New Reality Series (6x1-hour presentations), NorCal SCI

## **PUBLICATIONS, continued**

### **SELF-STUDY COURSES**

**"The Groundwork: Understanding spinal cord injury & getting started with SCI clients"**  
*2024 8-hour self-paced course*

**"Whole-Body Integration after Paralysis: Strategies to facilitate deep connection"**  
*2022 2-hour self-paced course*

**"Connecting to the Core: An integrated approach to trunk control & posture after SCI"**  
*2022 2-hour self-paced course*

**"Improving Posture after SCI: Essential concepts & exercises to build trunk control"**  
*2022 2-hour self-paced course*

**"Supporting At-Home SCI Rehab: Best practices for caretakers & partners"**  
*2021 2-hour self-paced course*

## **PROFESSIONAL MEMBERSHIPS**

**2025 - PRESENT Association of Neuro Activity Based Professionals (ANABP)**

**2016-2022 Pilates Method Alliance**

### **PROFESSIONAL DEVELOPMENT COURSES TAKEN**

**2025 MSTR (McLoughlin Scar Tissue Release)** - Cyndi George  
*8 hour NCBTMB#1668 in San Francisco, CA*

**2024 The Nerve Project:** Exploring the Nerve Tree in Relationship - Gil Hedley  
*5 hours NCBTMB#15287-00 in Bend, OR*

**2024 Locator Test Assessment Protocol (LTAP)** Level 1 - Anna Hartman  
*12 hours Kentucky PTA #298-APTAKY-2024 in Phoenix, AZ*

**2024 REVitalize Mastermind** - Anna Hartman  
*22 hours in Vista, CA*

**2024 Discover your Reciprocity** - Brent Anderson  
*8 hours NPCP#6143 in Phoenix, AZ*

**2023 REVitalize Mastermind** - Anna Hartman  
*22 hours in Vista, CA*

**2023 Pilates on Tour Conference** - Balanced Body  
*18 hours NCPC#17926-4382 in Monterey, CA*

**2022 Pilates on Tour Conference** - Balanced Body  
*12 hours, online*

**2022 Integrated Movement Series, Conference 6** - Balanced Body  
*14 hours NCPC#17926-3587*

**2021 Rotate & Reciprocate** - Cynthia Bahmani  
*San Francisco, CA*

**2020 REVitalize Mentorship** - Anna Hartman  
*50 hours, online*

**2020 Pilates for Neurological Conditions** - Mariska Breland & Taylor Galmarini  
*Santa Rosa, CA*

**2019 Pilates Method Alliance (PMA)** Annual Conference - Monterey, CA

**2019 Pilates on Tour Rehab Summit** - Balanced Body  
*Phoenix, AZ*

**2018 Pilates Method Alliance (PMA)** Annual Conference  
*19.75 hours NPCP#8308 in Las Vegas, NV*

**2018 Neuro-Movement** - Trent McEntire  
*12 hours in Lafayette, CA*

**2017 Bartenieff/Laban Studies** - Janice Meadan  
*Chicago, CA*

**2017 Pilates Method Alliance (PMA)** Annual Conference  
*14 hours NPCP#8308 in Indian Wells, CA*

**2017 Primal Pilates** - Louise Johns & Claudia Moose  
*9 hours NPCP#8946 in Lafayette, CA*

**2016 Primal Movement WORKS! Foundations** - Louise Johns & Claudia Moose

**2015 Pilates on Tour Conference** - Balanced Body  
*Sacramento, CA*

**2015 Reconditioning Specialist** - Claudia Moose  
*Lafayette, CA*

**2014 NeuroKinetic Pilates** - Alejandra Monsalve  
*Truckee, CA*

**2013 Yoga for People with Disabilities**  
*San Francisco, CA*

**2011 Neuro Recovery Specialist Training**, Jerry Rainey/SCI-FIT  
*Pleasanton, CA*



## Scope of Practice

The **Nationally Certified Pilates Teacher (NCPT)** must work within the scope of practice of a Pilates teacher as outlined below:

**The following is *within* the scope of practice of a Pilates teacher.**

1. Design Pilates exercise programs according to an individual's needs.
2. Recognize conditions that would preclude a client from safely participating in a Pilates exercise program.
3. Coach, provide general information, and direct clients to seek medical attention as necessary.
4. Receive exercise guidelines and clearance from medical practitioners, when appropriate, to ensure client safety.
5. Document client progress and cooperate with referring medical practitioners.
6. Promote exercise to improve overall health.
7. Request permission to touch clients and observe practice laws within your jurisdiction.
8. Use appropriate touch to facilitate movement, position the client, and prevent injury or damage.

**The following is *beyond* the scope of practice of a Pilates teacher:**

1. "Prescribing" an exercise program.
2. "Diagnosing" a client with any medical, mental or physical condition.
3. Continuing to train a client with a condition that is beyond your knowledge without appropriate medical clearance.
4. "Prescribing" diets or recommending supplements.
5. Claiming to "treat" or "rehabilitate" injury or disease.
6. Monitoring (measuring with instrumentation) the progress of clients referred by therapists or medical practitioners.
7. Offering counseling.
8. Claiming to be competent to offer professional education beyond the limits of your credentials.
9. Applying inappropriate touch.
10. Continuing to train a client who exhibits any of the following unusual symptoms: e.g. chest pain, prolonged dizziness, rapid heart rate, shortness of breath, significant decrease in coordination, loss of consciousness, faintness, nausea, blurred vision, prolonged or increasing pain.