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Performance Pillar Training:
Foundational Stability & Strength

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OBJECTIVES

- Define "Warding Patterns"
- Discuss the physiological rationale and adaptations of Warding Patterns
- Present & have attendees experience numerous Warding Patterns, from simple to complex
- Provide guidance and structure on how to apply Warding Patterns into any clients' program

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DEFINED

- warding (v)
  - to guard or protect
  - to fend off or create space
- Warding Patterns (IoM)
  - generating body wide tension against external force while producing pre-position or gross movement patterns
  - maintaining whole body tension while producing integrated movement patterns

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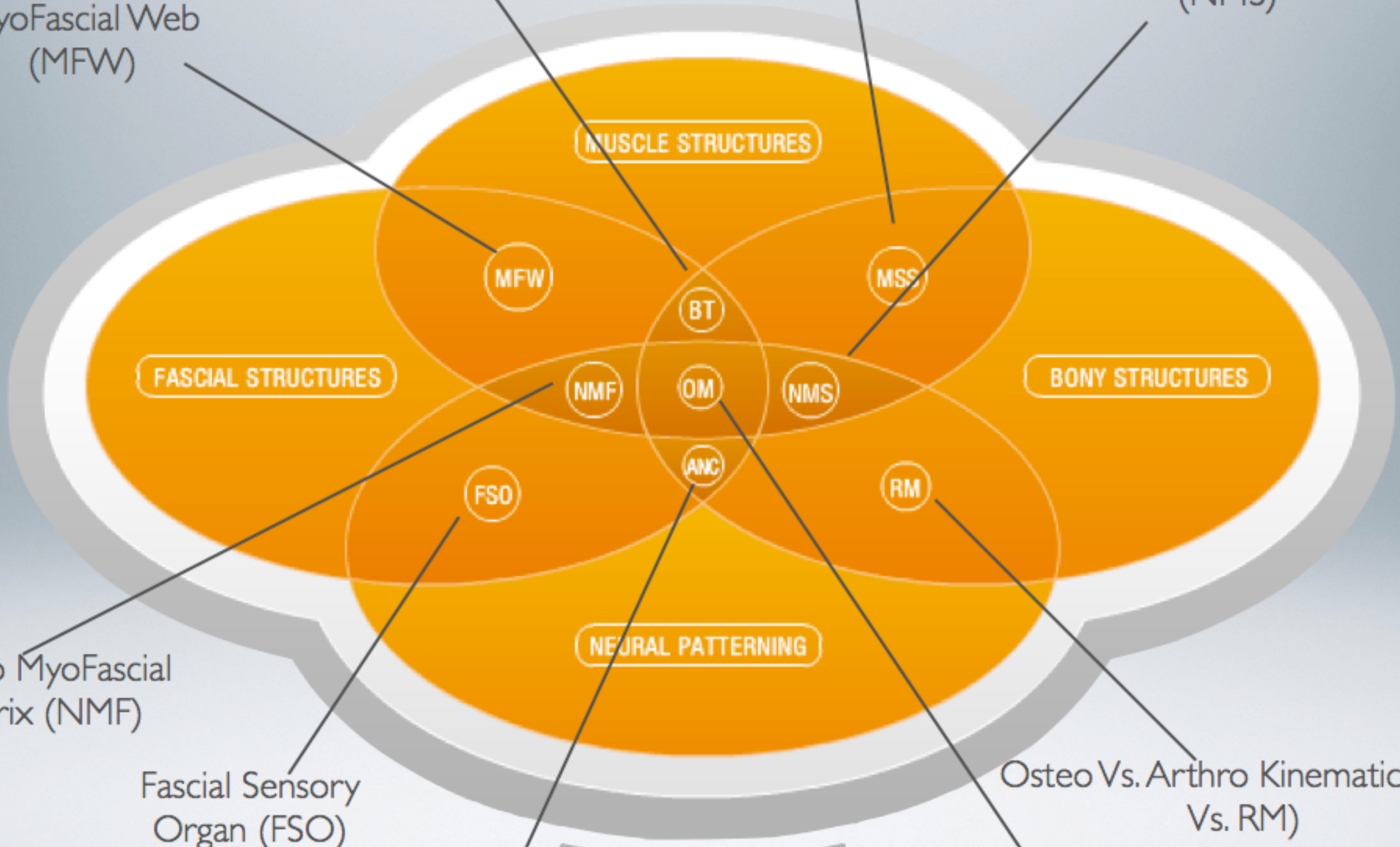
BioTensegrity (BT)

Musculo-Skeletal System (MSS)

Neuro -Musculo-Skeletal System (NMS)

MyoFascial Web (MFW)



Neuro MyoFascial Matrix (NMF)

Fascial Sensory Organ (FSO)

Alpha Nerve Control Input (ANCI)

Osteo Vs. Arthro Kinematics (RM Vs. RM)

'Optimal Movement Training Model' (OM)

RATIONALE

- We must be able to produce and transmit force in an integrated fashion
  - The neuromyofascial system responds better to variation than to repetition
- Whole body, "complex" movement is critical to systemic adaptation
  - Vector variable & proprioceptively rich exercise is extremely beneficial to the neuromyofascial system
- Warding and other Loaded Movement Training styles allow muscles to turn on AND off
  - Efficiency, preparedness and capacity

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ADAPTABILITY

- Wolff's Law:
  - Skeletal structure is organized/reorganized according to the applied lines of stress

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- Davis' Law:
  - Soft tissue (contractile & connective) is organized/ reorganized according to the applied lines of stress

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- Movement Skill
  - Motor learning, development & ability adapt according to the applied stress

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ADAPTABILITY

Specific Adaptation to Imposed Demands (S.A.I.D)

- Specificity Paradox
- The movement demands of sport & life are, specifically, variable…

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ADAPTABILITY

Specific Adaptation to Imposed Demands (S.A.I.D)

- Required Outcome / "Specific Adaptation":
  - Strong, powerful, skilled and safe movement in variable, reactive directions through a solid & robust architecture from non-traditional positions
- Needs Analysis / "Imposed Demand":
  - Training strategy that applies balanced variability (direction, speed & force)

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IoM Program Design

Loaded

Linear Movement (Recurrent)

Transitional Movement - 3D (Variable)

UnLoaded

Loaded Linear Training

Loaded Movement Training

Unloaded Linear Training

Unloaded Movement Training

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IoM Program Design

Loaded

Loaded Linear Training

Bench Press
Deadlift
Hang Clean
Bicep Curl
Cycling / Rowing
Etc.

Loaded Movement Training

Warding Patterns

Linear Movement (Recurrent)

Transitional Movement - 3D (Variable)

Unloaded Linear Training

Skill Development Training
Weak Link Activation
Therapeutic Rehab
Running / Swimming etc.
Restful Poses

Unloaded Movement Training

SAQ Training
Interactive Movement
Functional Rehab
Tai Chi
Ground to Standing Drills
Dowel Rod Movement Prep

UnLoaded

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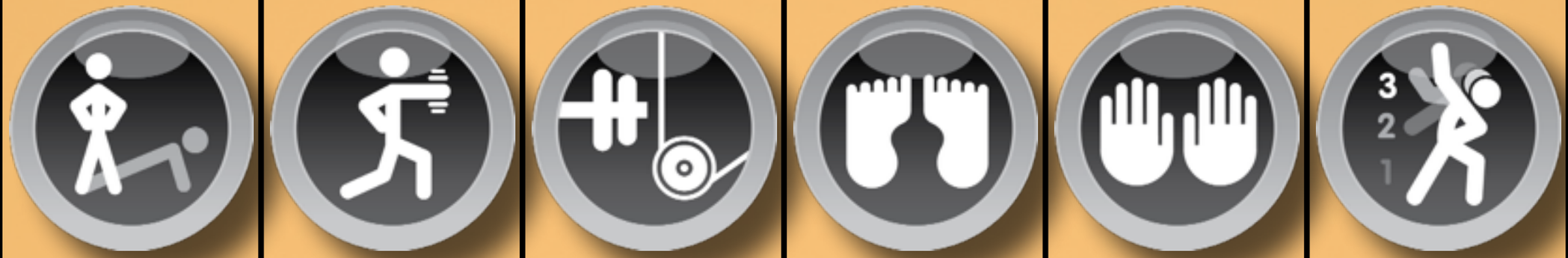
IOM EXERCISE DESIGN AT A GLANCE



ORIENTATION	ACTION	DEVICE	FOOTPRINT	HANDPRINT	THRESHOLD
In which way will you orient your body to gravity / ground?	What gross movement is occurring in the body?	What external load are you choosing and why?	Foot position (stance) and / or foot movements while performing the exercise?	Hand position and / or hand movements while performing the exercise?	Acute variable manipulation (i.e. sets, reps, weight, ROM, speed etc.)

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ACUTE VARIABLE	Threshold 1 	Threshold 2 	Threshold 3 
SPEED	Slow	Medium	Fast
MOVEMENT	Known	Somewhat known	Unknown
STABILITY	Stable	Moderately dynamic	Dynamic
FORCE (WEIGHT)	Low	Moderate	High
COMPLEXITY	Simple	Moderate	Complex
SURFACE	Stable	Changing	Dynamic
BASE OF SUPPORT	Wide (stable)	Narrow	Varying (movement)
VOLUME (Sets + Reps + Intensity)	Low	Medium	High
ROM (Range of Motion)	Small (initial range)	Medium (self selected range)	Large (end range)

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Screening

Adequate Motion Observed ?

Foot / Ankle Complex

Hip Complex

Thoracic Spine

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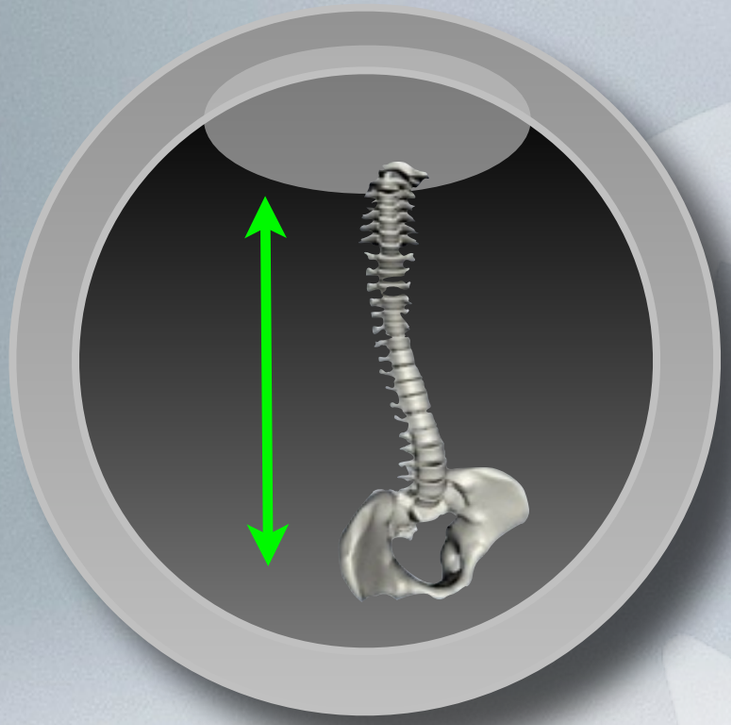
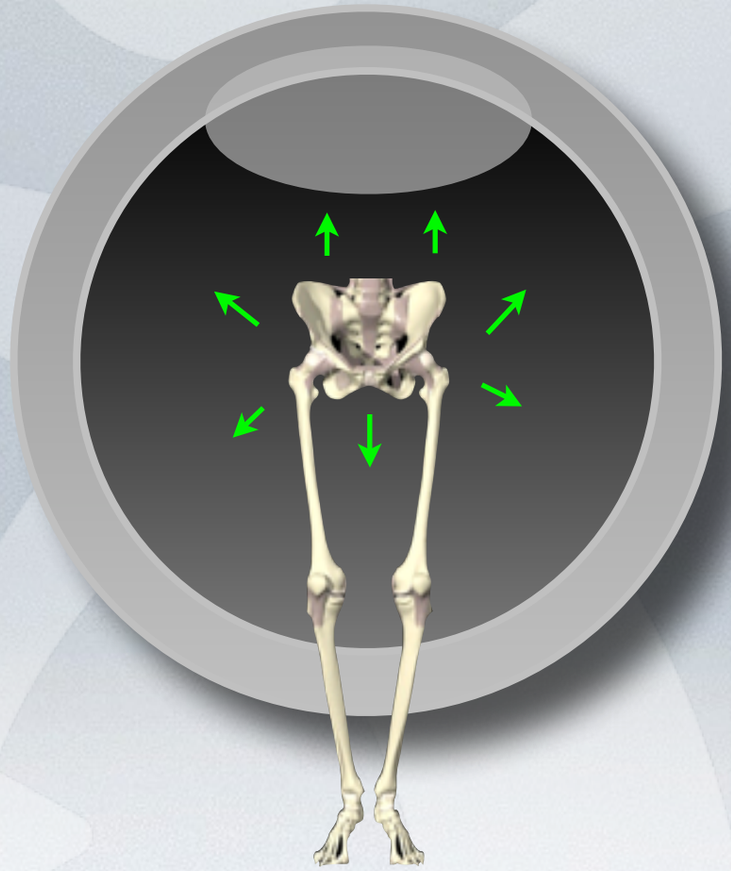
Coaching Cues

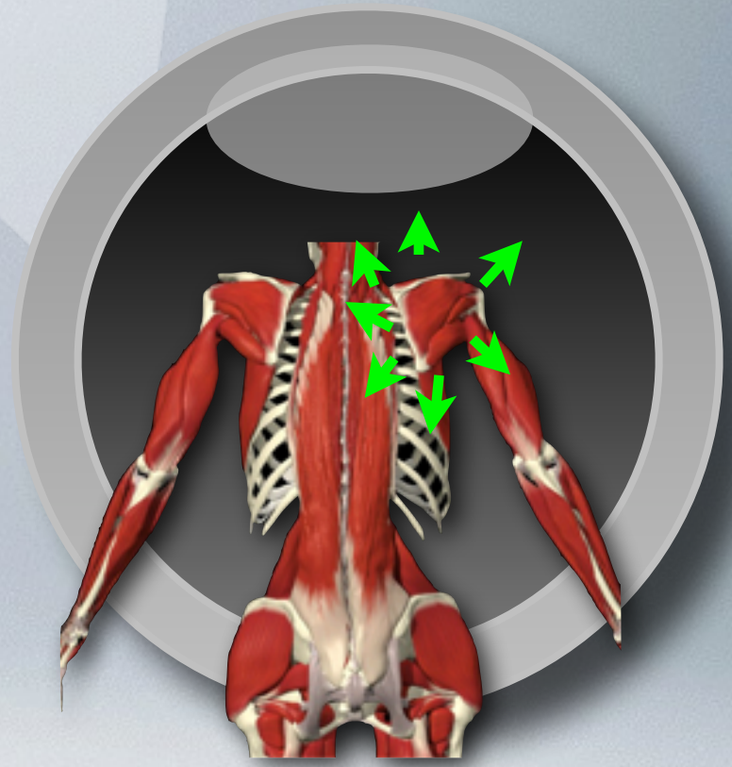
(Adapted from Chuck Wolf, MS)



1. Maintain Length in the Spine



2. Initiate Movement with the Hips



3. Reach with the Scapula

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ORIENTATION		- Half Kneeling - Standing - Gym Floor Surface
ACTION		- Stationary Force Production
DEVICE		- Stationary Anchor (i.e. Wall, Partner (stationary), door frame, equipment frame)
FOOTPRINT		- Static Footprint
HANDPRINT		- Static Handprint
		- Wide BOS - Low Force - Vector Variability - Known Response (Static Anchor) - None Reactive

Threshold | Ward

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ORIENTATION		- Kneeling - Half Kneeling - Standing - Gym Floor Surface / Outdoor Surface
ACTION		- Stationary Force Production - Locomotion - Level Change (Initial -Mid ROM)
DEVICE		- Stationary Anchor (i.e. Wall, Partner (stationary), door frame, equipment frame) - Cable (Isotonic resistance) - Varying Anchor Points
FOOTPRINT		- Dynamic Footprint Variability - Locomotion (3-Dimensional)
HANDPRINT		- Static Handprint Variability
		- Varying BOS - Medium Force - Vector Variability - Mostly Known Movement (Moderate Reactivity) - Medium Movement Speed - Simple to Moderate Movement Complexity - Small to Moderate ROM

Threshold 2 Ward

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Threshold 3 Ward

ORIENTATION		- On-ground (prone/supine/side-lying) - Kneeling - Half Kneeling - Sitting - Standing - Gym Floor Surface / Outdoor Surface (including ice)
ACTION		- High Force Production with Varying Footprint patterns - Locomotion (at high tempo) - Level Change (End ROM) - Intermittent Warding (moving to / away from the Ward)
DEVICE		- Dynamic Anchor (i.e. sled, partner (moving), cable Isotonic Resistance), Bungee (Variable Resistance) - Use of Speed Ladder / Cones / Hurdles - Dowel Rod / Hockey Stick - Slant Boards
FOOTPRINT		- Highly Dynamic Footprint Variability - Locomotion (3-Dimensional)
HANDPRINT		- Dynamic Handprint Variability (3-Dimensional)
		- Varying BOS - High Force - Vector Variability - Known and Unknown Movement (High Reactivity) - High Movement Speed - High Movement Complexity - End ROM - Highly Reactive - Head Shake / 1 Eye Closed

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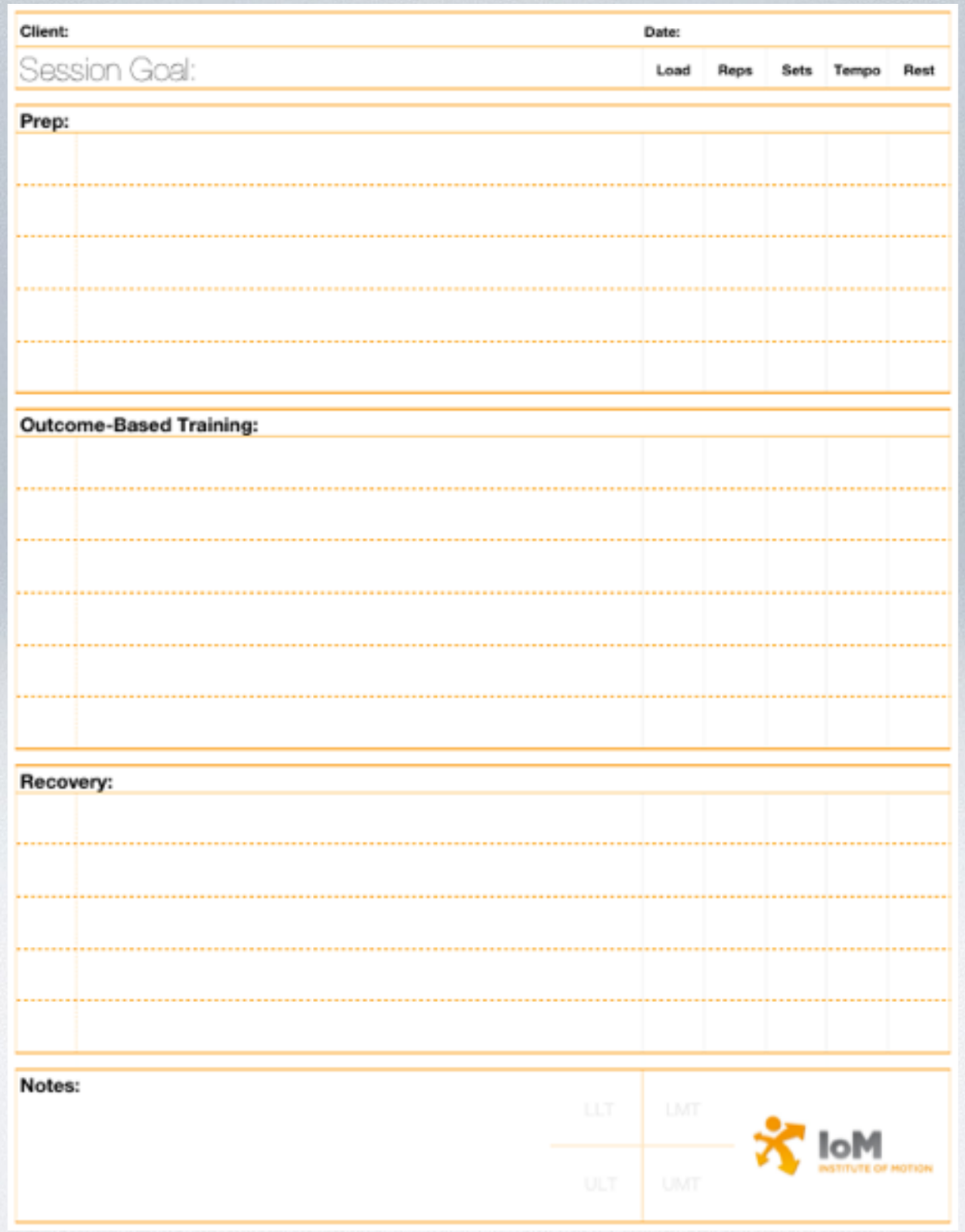
WARDING IN YOUR PROGRAMS



Thank You!!

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