



Cramblett PT, CFMT, CSCS, Coach

- Physical Therapist **20+ years, physio educator**
- Cycling and Strength / Conditioning Coach
- Cyclist / Racer 25+ years
- PT / fitter **Garmin '09-'11, 16 multiple Olympians** and triathletes
- Fit Certified: **RETUL, FIST, SICI, Bike PT, IBFI**



Fixed !

Four Steps to Comprehensive
Rehabilitation

Inspiration



A Macro Adapter's Story

Injured Rider Crushes Pro Road Race on Fan's Old Stumpjumper



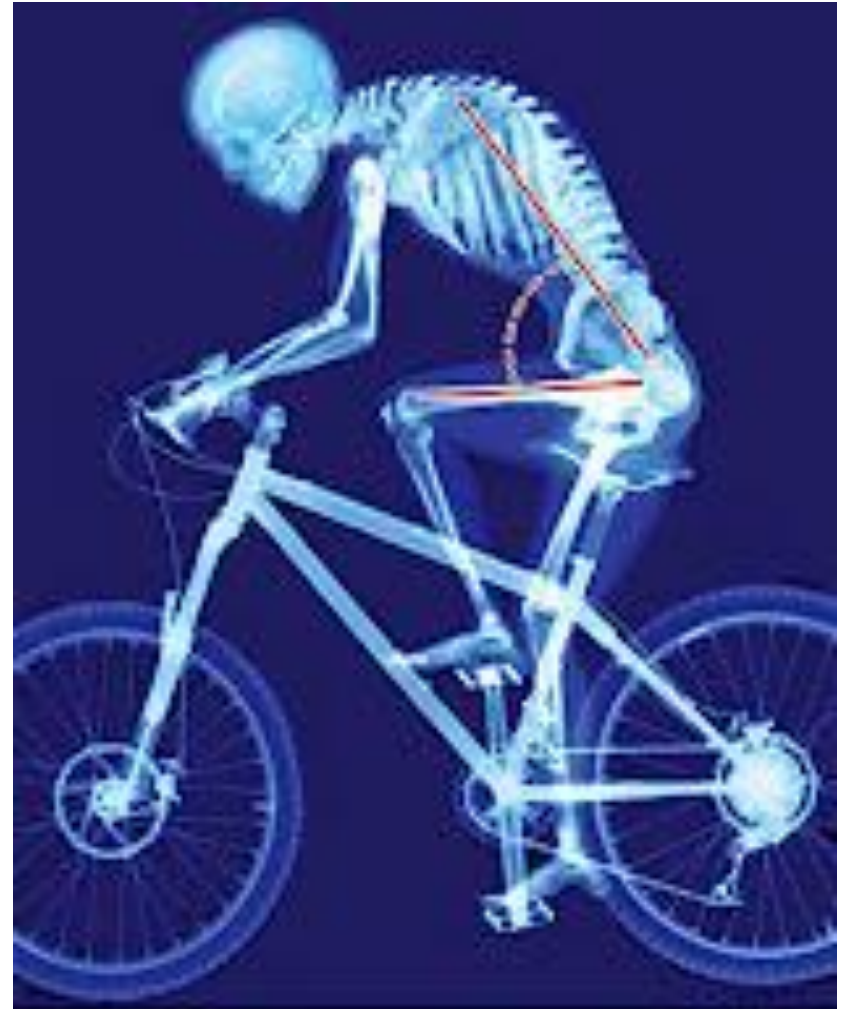
Zack Allison rests with his borrowed Stumpjumper at the Tour of the Gila. Photograph courtesy of Justin Stanley



Immobility Causes



© 2011 www.artisclon.com



© 2011 www.artisclon.com

**STUCK IN
RUTS OF
MOVEMENT**





Performance

Fitness

Health



You're bouncing checks

ZONE of PAIN

Resilience

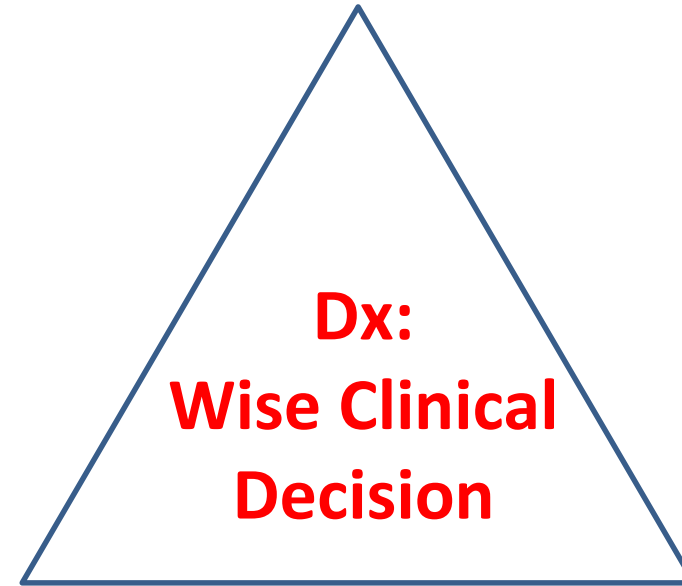




Wise Diagnoses / Treatments

Evidence Based Practice
Evidence Informed
Practice*

Best Objective
Data / Research

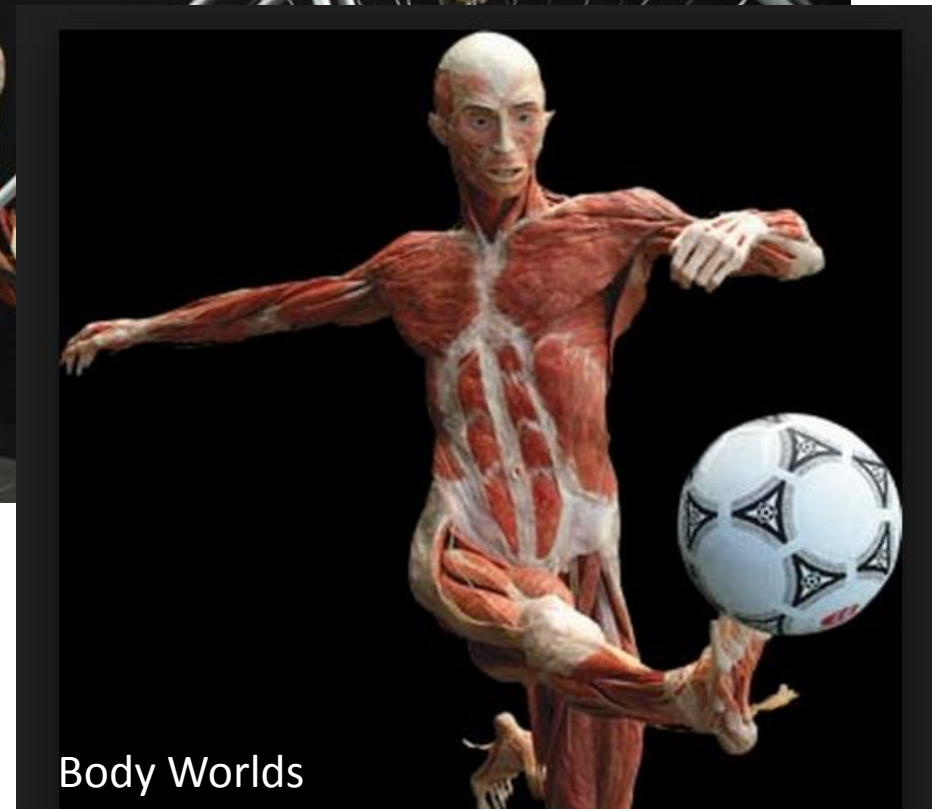


Dx:
Wise Clinical
Decision

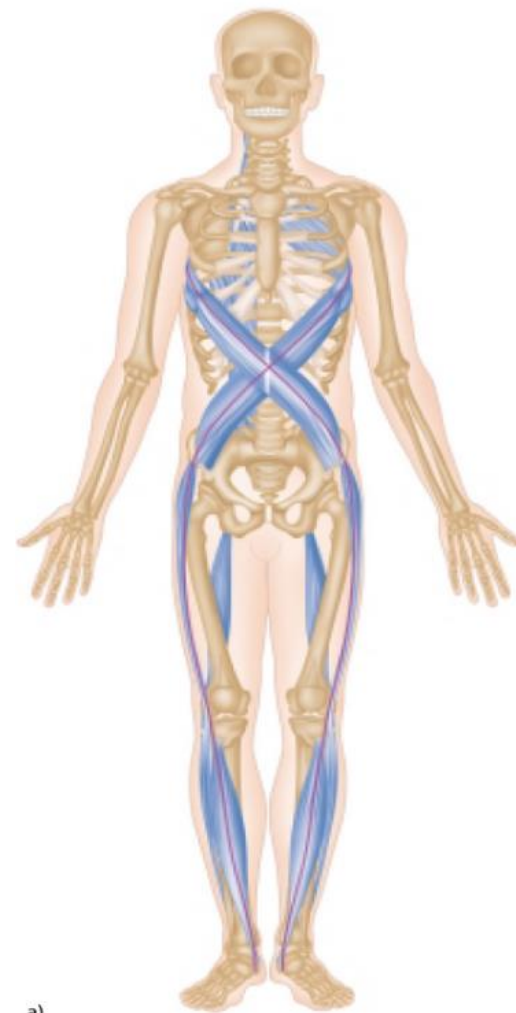
Clinical
Experience

Client
Values - Goals

Explore
Interconnectedness
of the
Fascial –
Musculo-Skeletal System



Anatomy of a Chain



a)

Systems in Balance



Find the Driver



Criminals



Tight ITB / Quads
Weak Core

Victims



WHAT HURTS:
Hamstring strain
Patellar Tendonitis

Think: Don't just treat the victim,
find the criminal causing the pain

Just because it hurts ...

BULLY!

Hip

Foot



Victims

Knee Pain

Back Pain

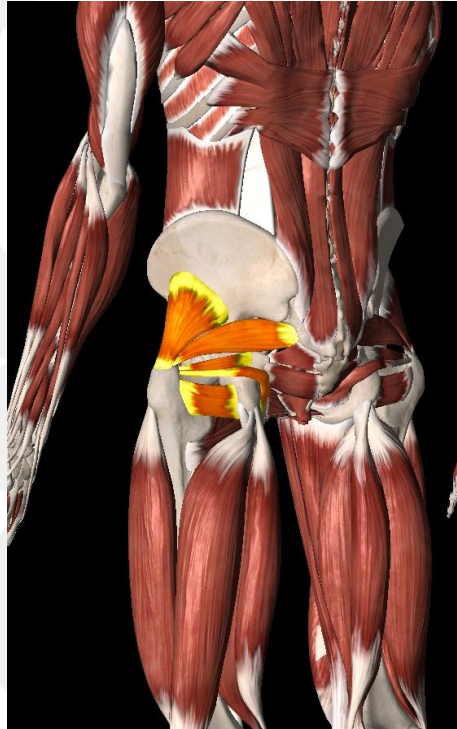
Doesn't necessarily mean it's *causing* the problem

Step 1



Mobility

Step 2



“Core” Control

Step 3



“Form”

Step 4



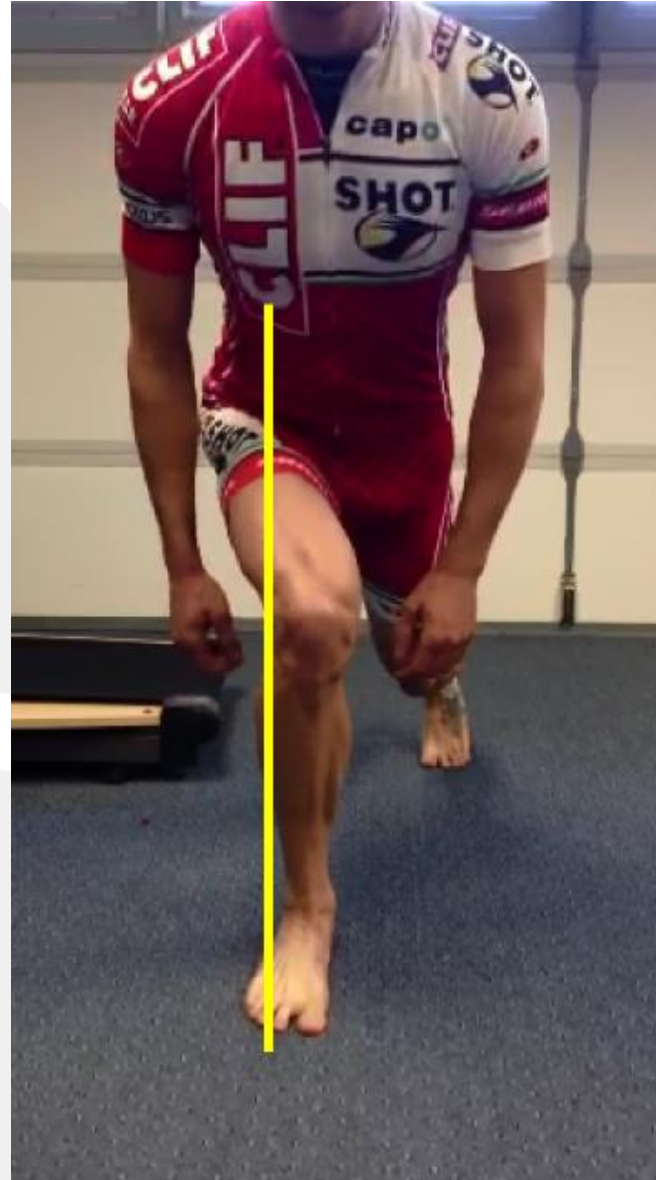
Strength /
Endurance

Phase I: Improving Mobility

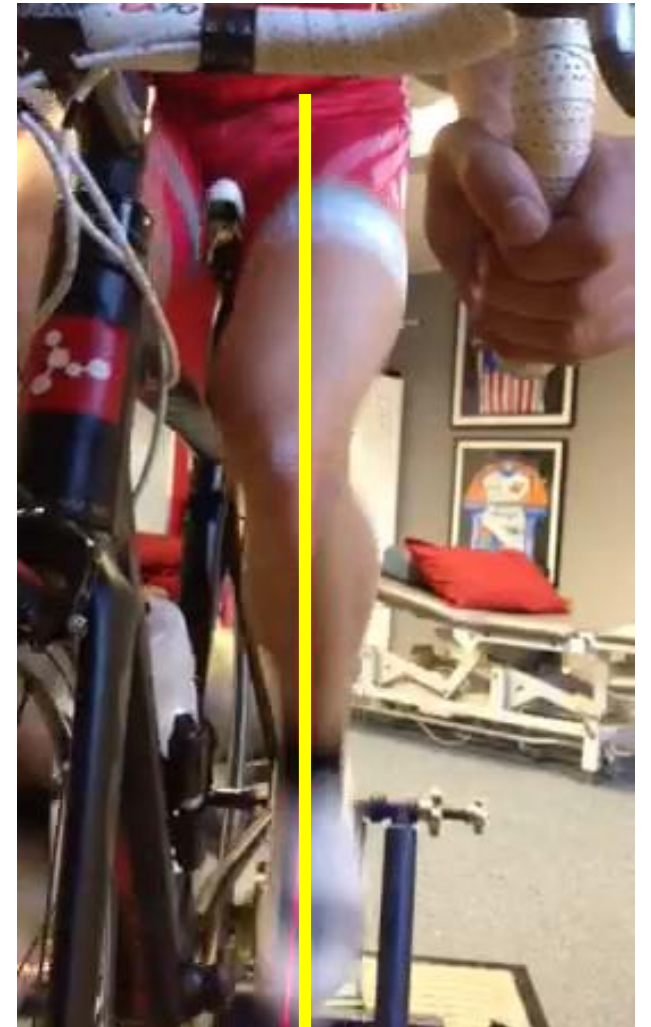
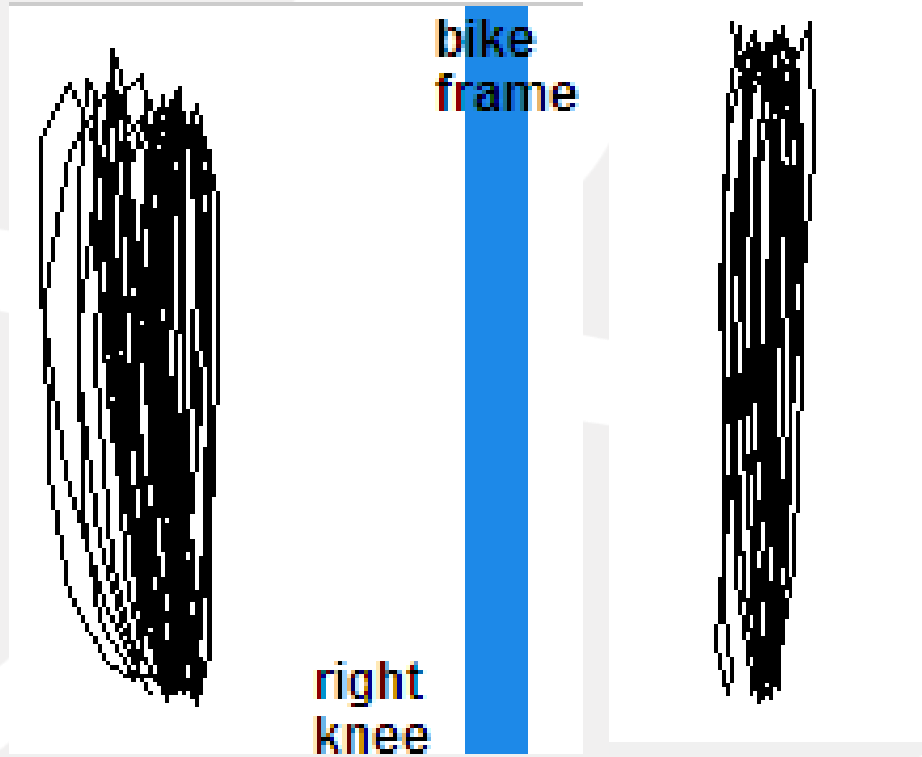


Eric – Professional Cyclist

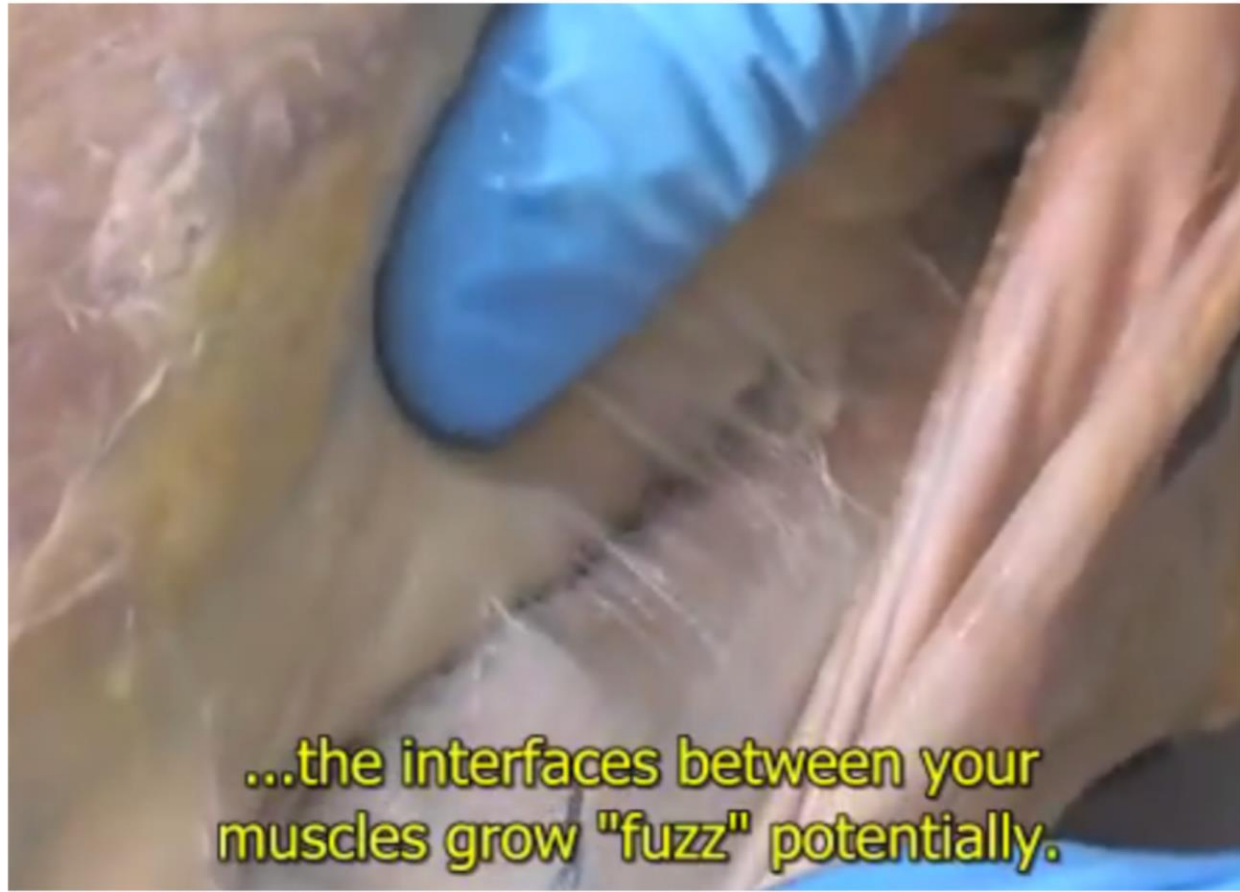
Chief complaints rt knee pain

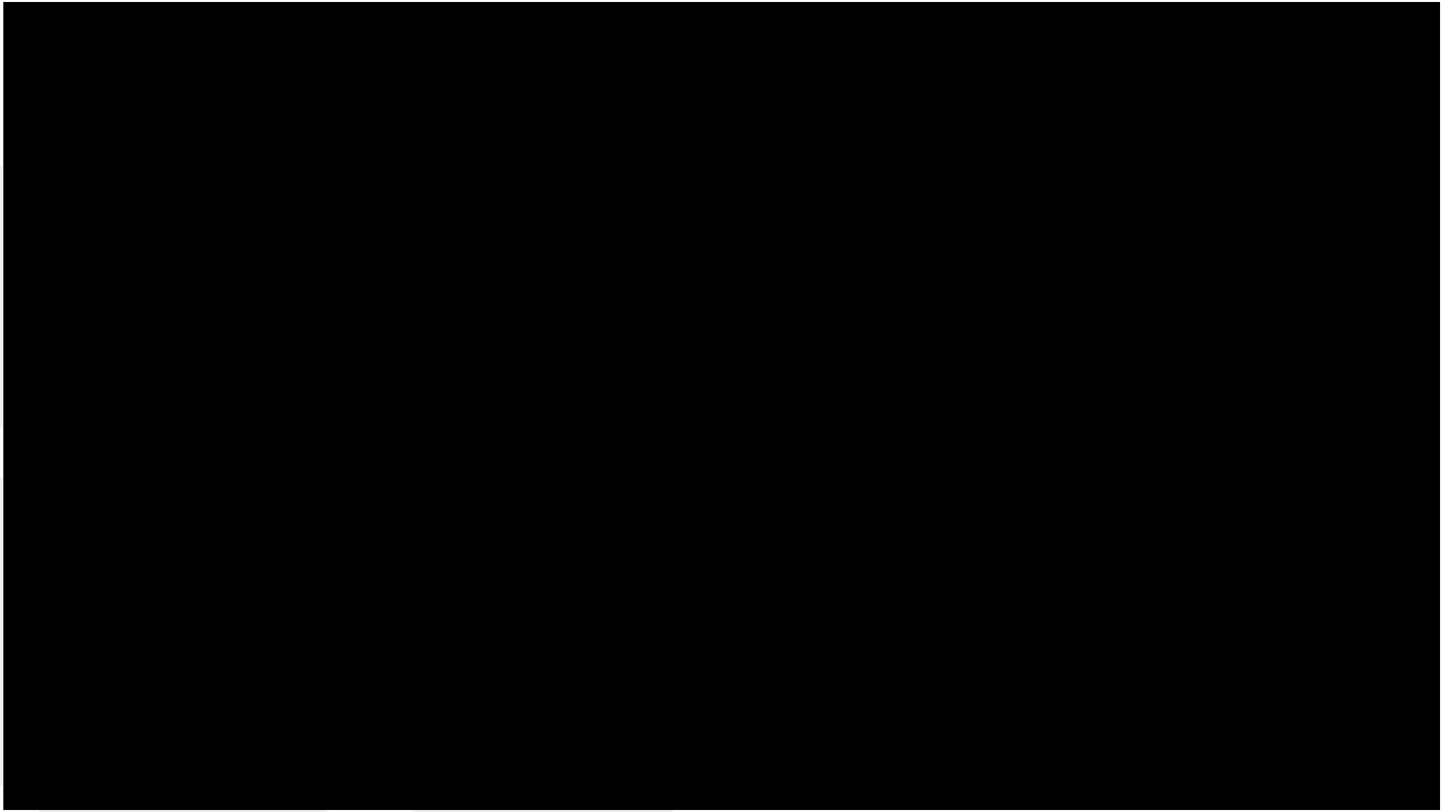


Pedaling Mechanics



Fuzz





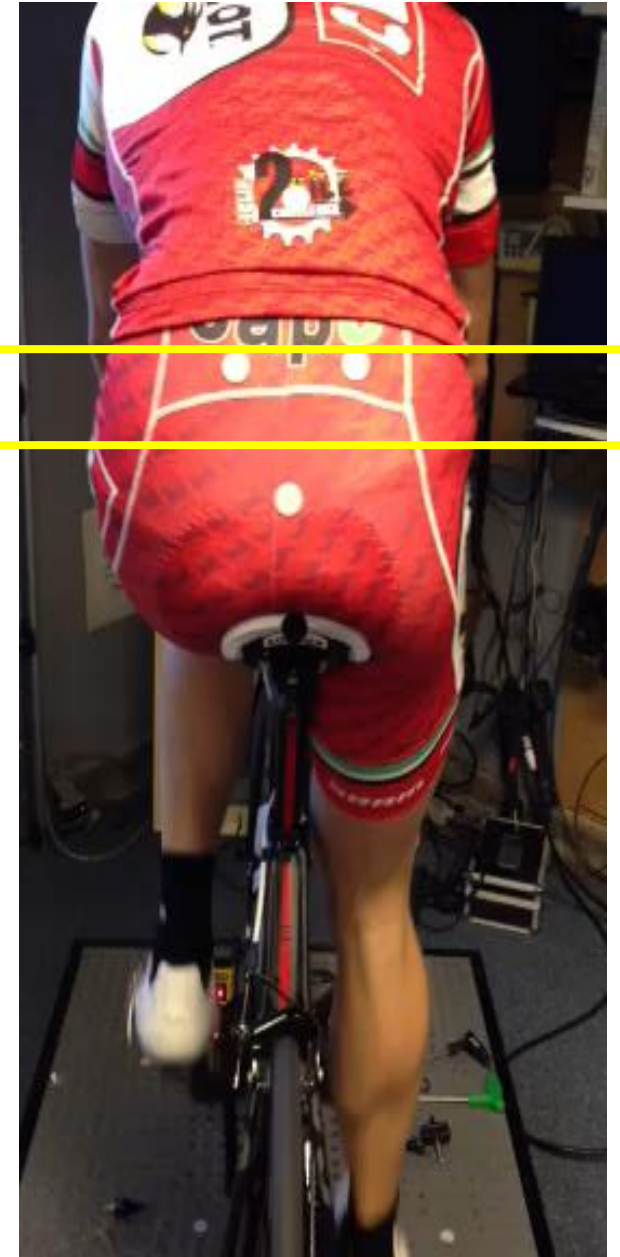




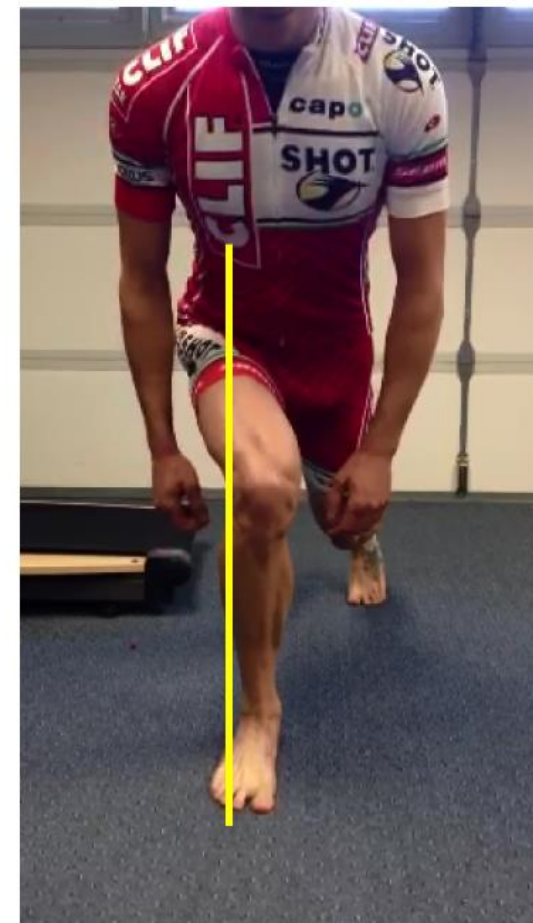
Left Hip Mobility Loss

Hip flexion: 120 left // 143 deg right

- Clinic:
 - Joint Mobilization, soft tissue mobilization at hip
- Home:
 - Foam Roller and Ball in Gluteal area
 - Active stretching – hip flexion with self joint mobs.



Dragging BRAKES

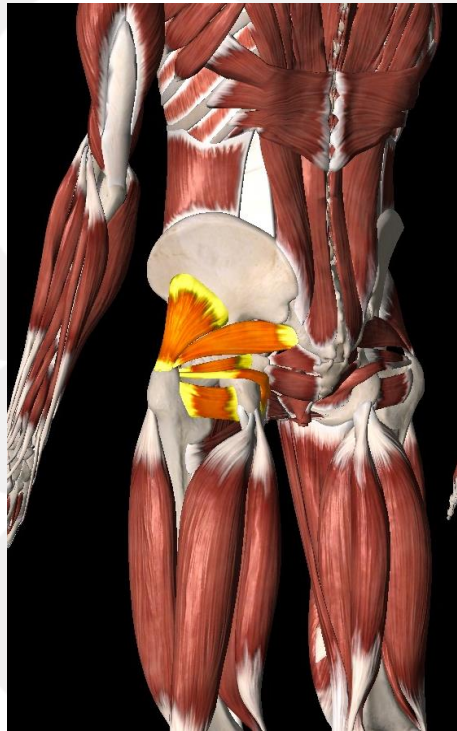


Step 1



Mobility

Step 2



“Core” Control

Step 3



“Form”

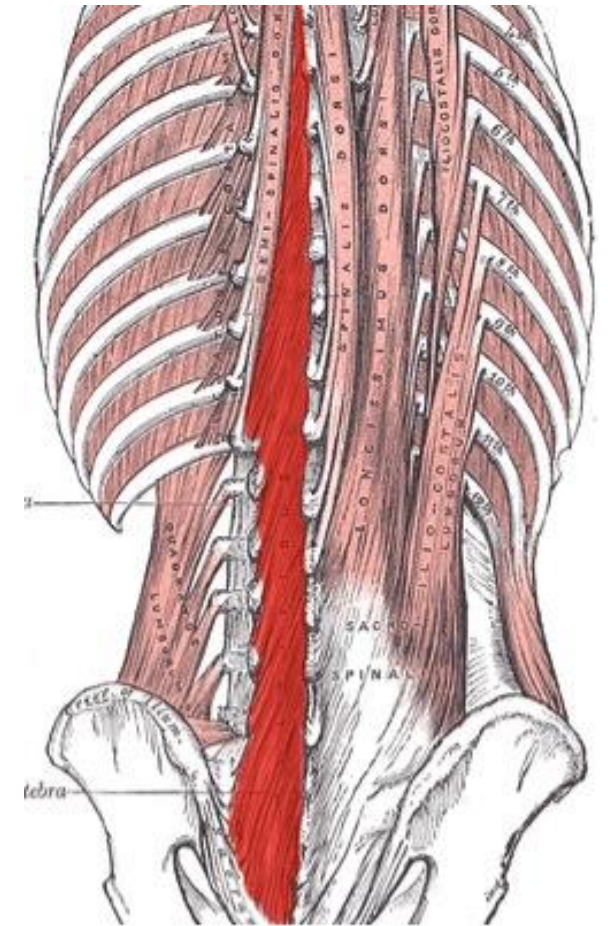
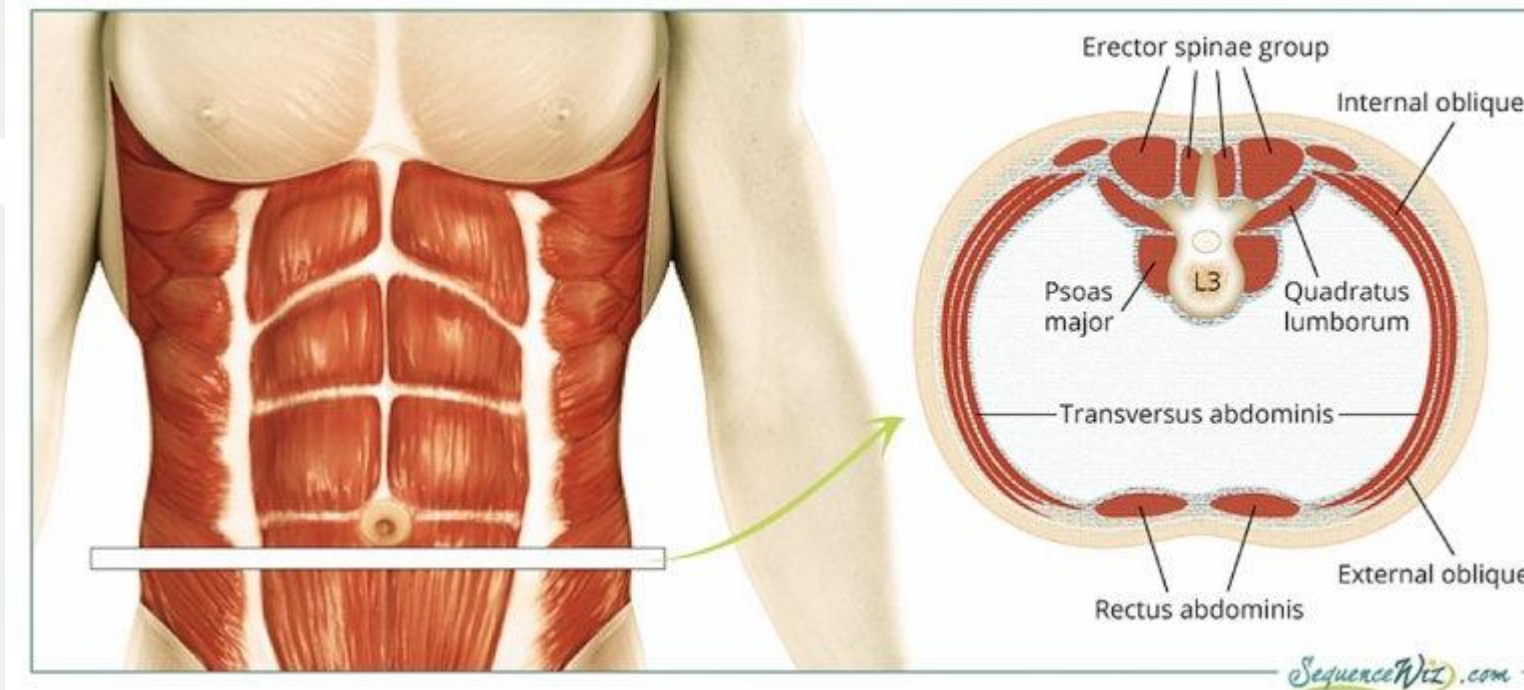
Step 4



Strength /
Endurance

Step 2

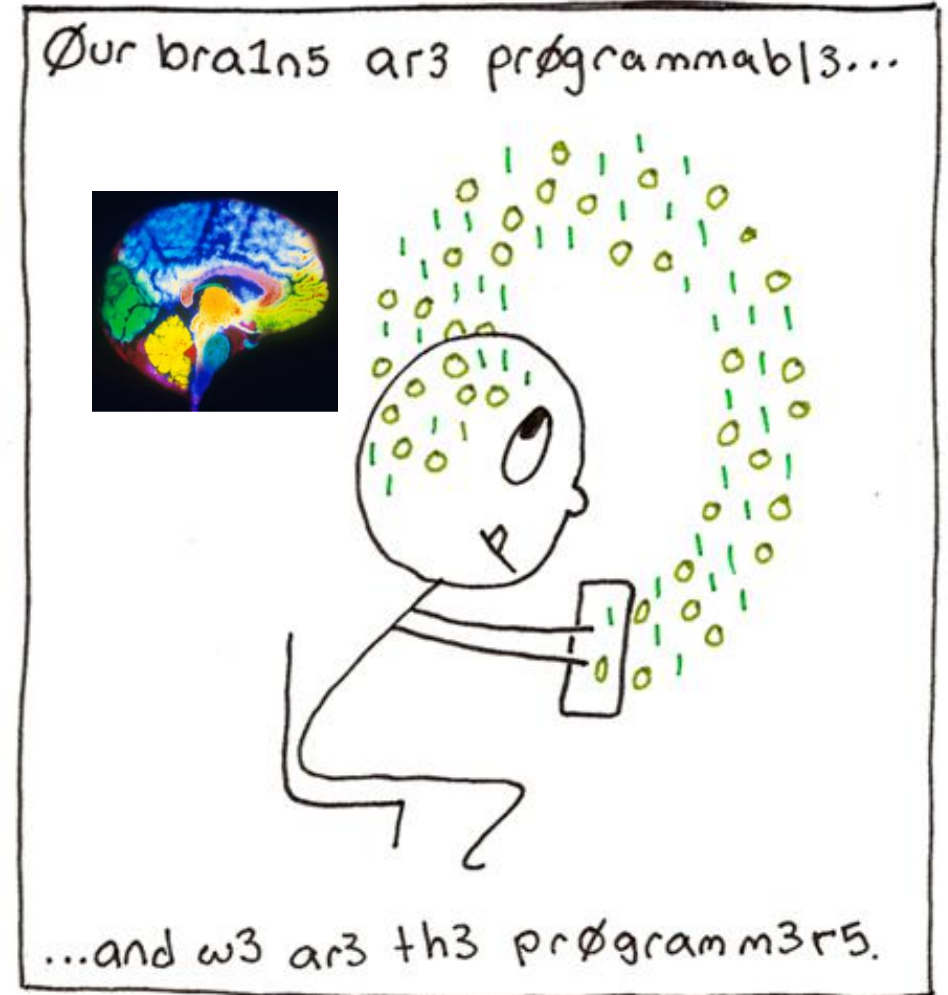
Local Neuro-Muscular (Motor) Control



CORE Strength / Control

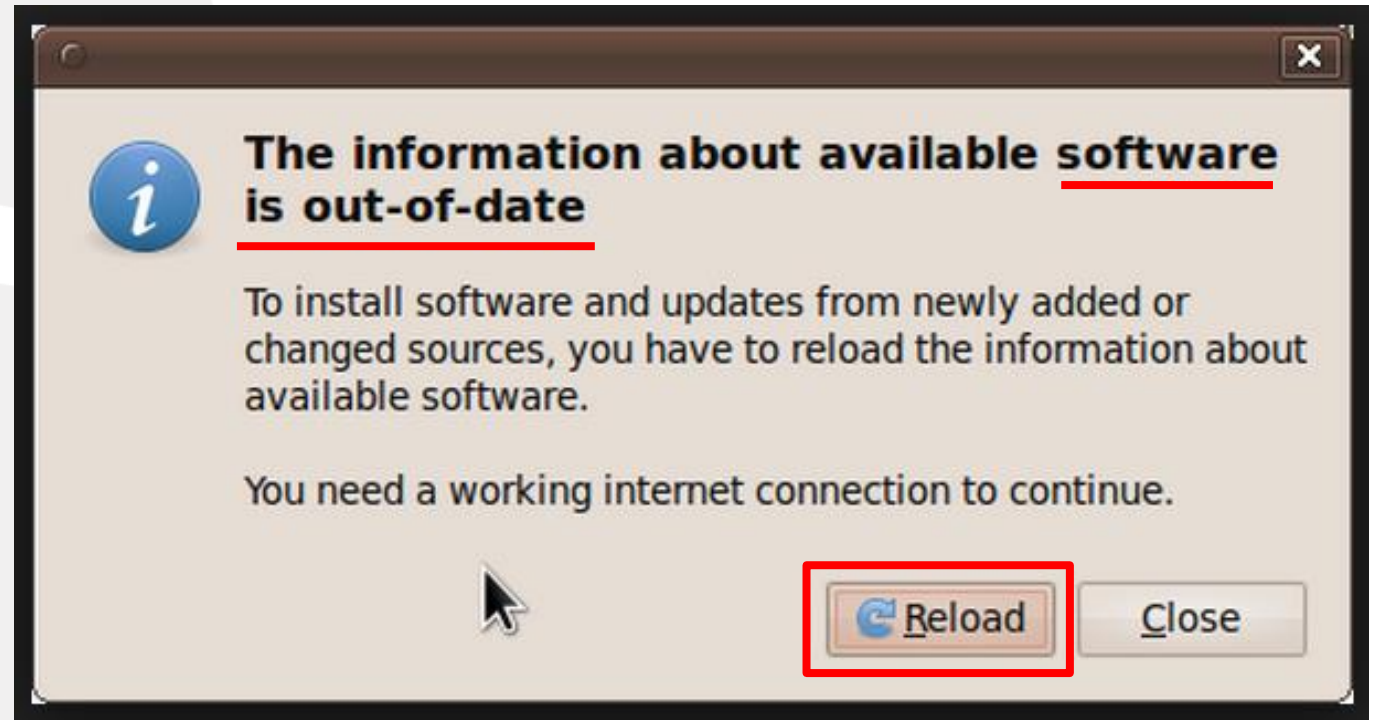
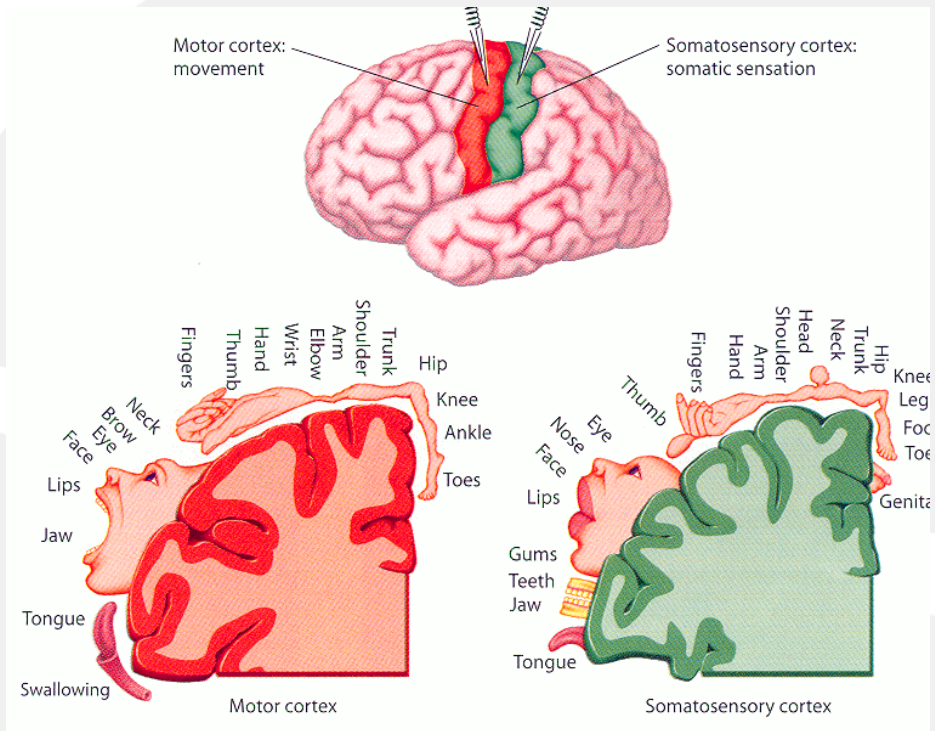
"Must activate the muscles, at right time, by the right amount, in the correct sequence, and turn off muscle appropriately"

–Bob Donatelli, PT, CSCS



Dharma Comics

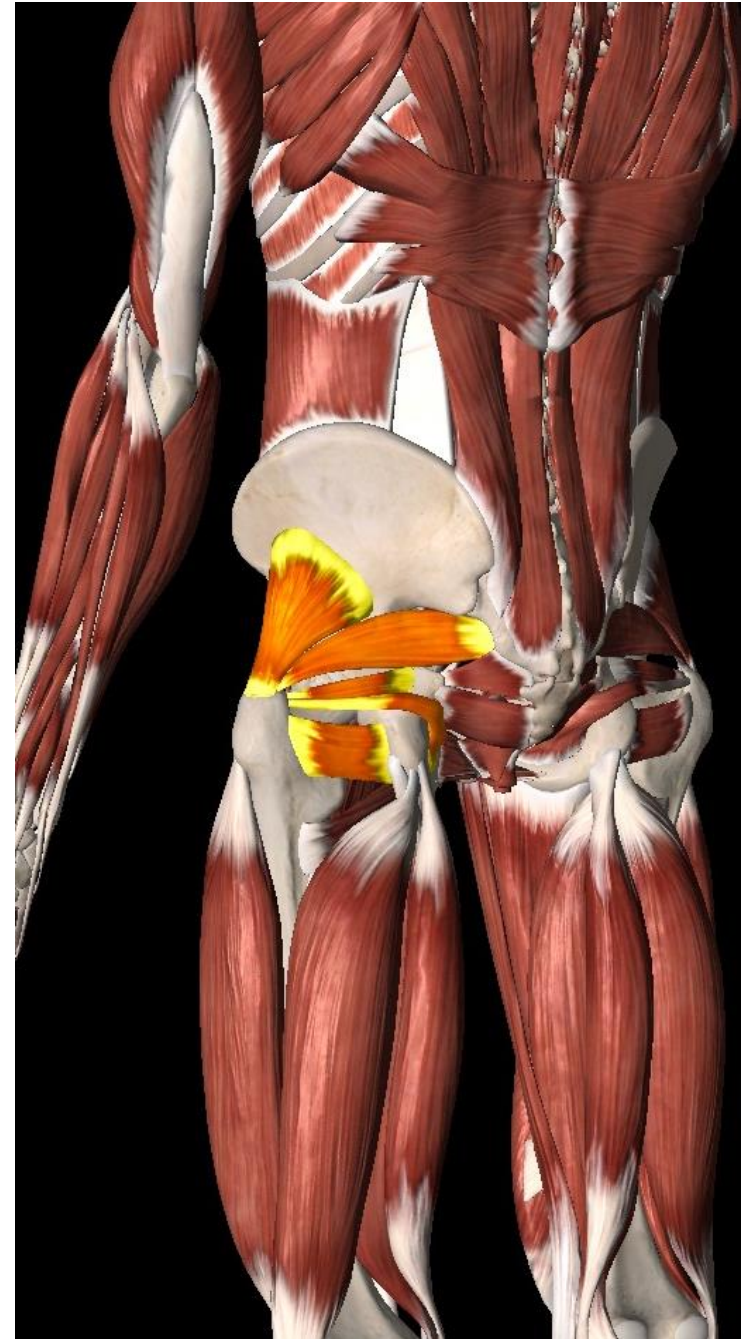
Local Core Neuro Muscular Control



Motor Control of 'Core'

- Hodges P, Richardson C. Feedforward contraction of transversus abdominis is not influenced by the direction of arm movement. *Exp Brain Res.* 1997; 114: 362-70
- Hodges P, Richardson C. Contraction of the abdominal muscles associated with movement of the lower limb. *Physical Therapy.* 1997; 77(2): 132-44

Redefining the “Core”



Core Muscle Strength



Local Core Control @ Pedal



“Isolated” Hip Training

- Deep hip rotators
- Glute Medius

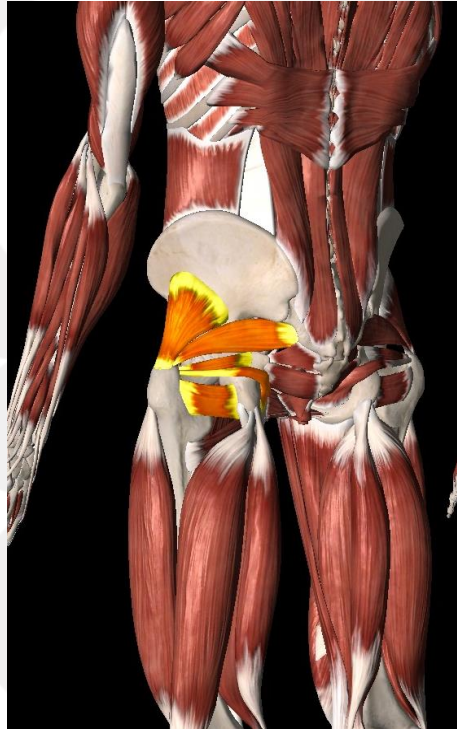


Step 1



Mobility

Step 2



“Core” Control

Step 3



“Form”

Step 4



Strength /
Endurance

Re – Learn Great Form Putting it together

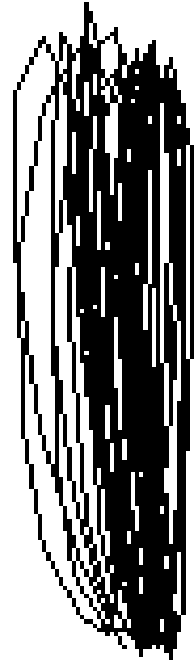
- Off the bike training
 - Back lunges
 - Seated Forward Bending



On The Bike



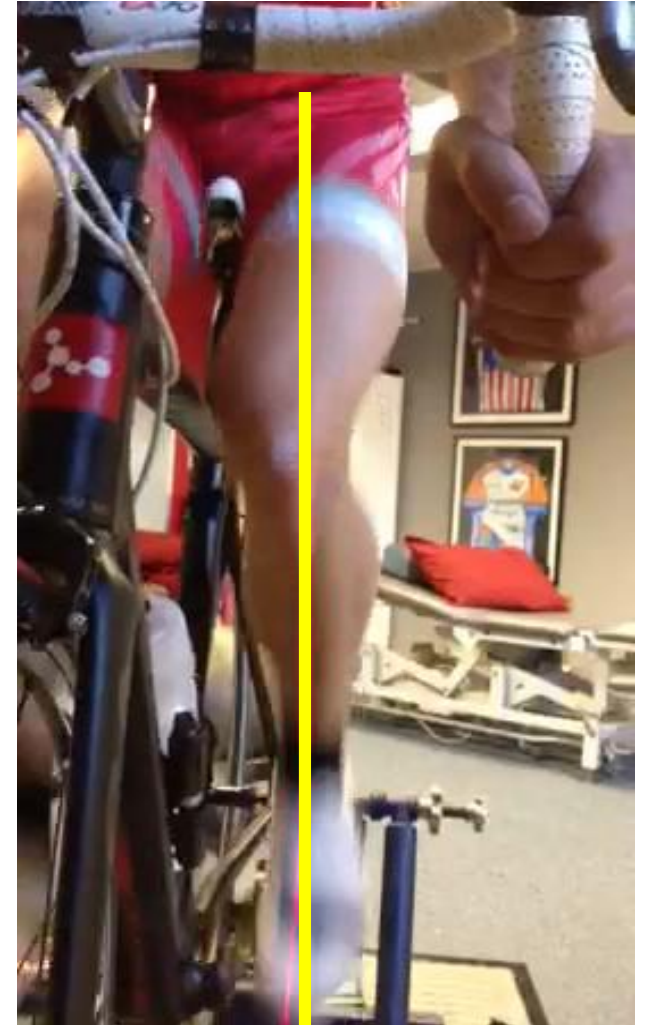
RETÜL



bike
frame



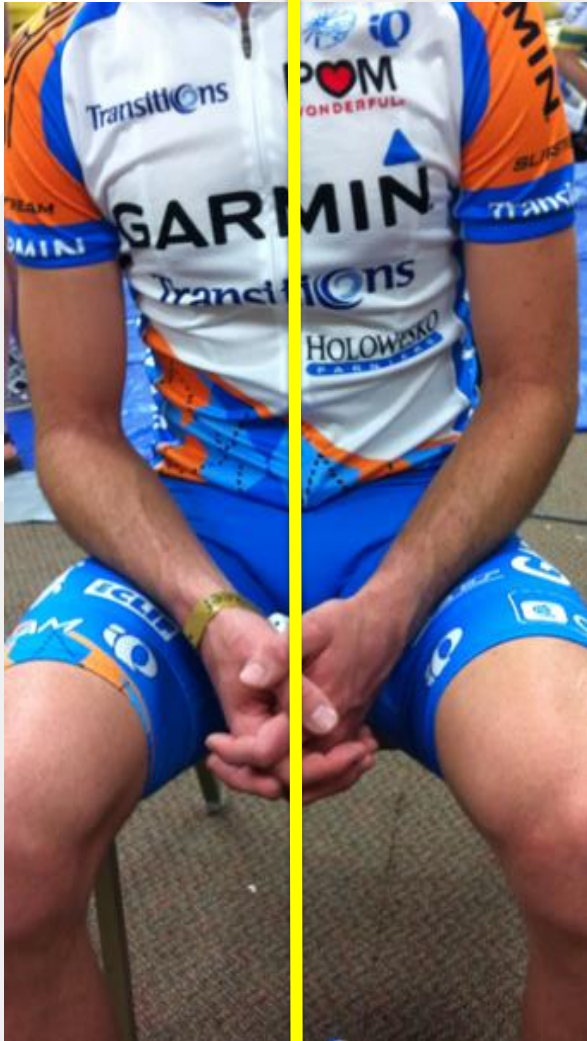
right
knee



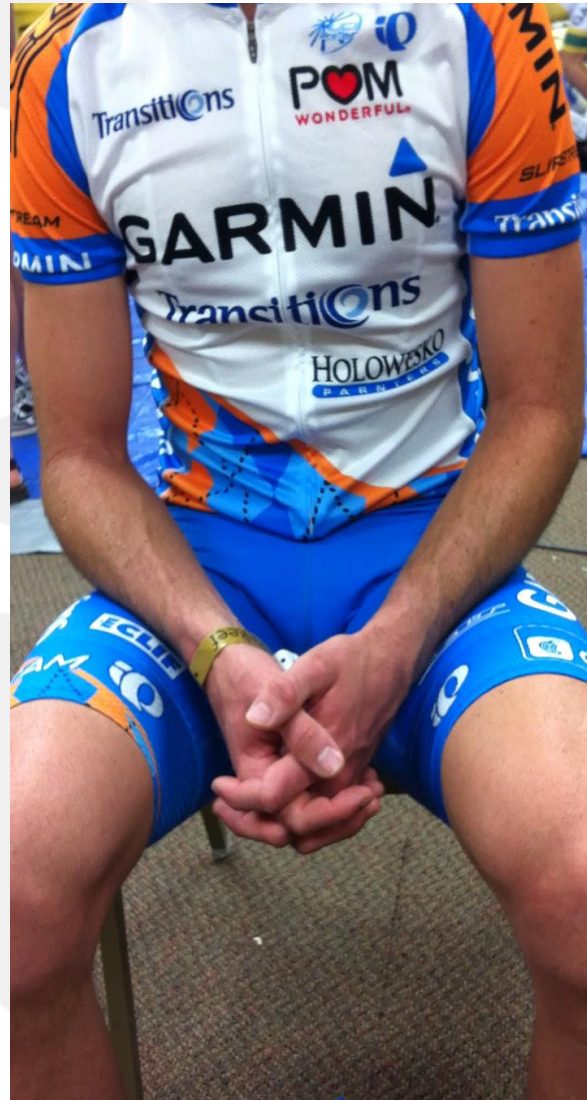
Local Core Control @ Pedal



“Thanks for helping me find my right leg !”



Christian Vande Velde,
xProfessional Cyclist



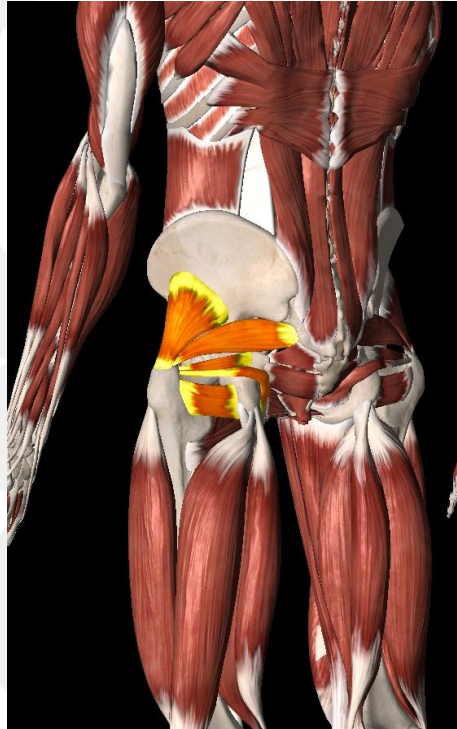
US Pro Challenge

Step 1



Mobility

Step 2



“Core” Control

Step 3



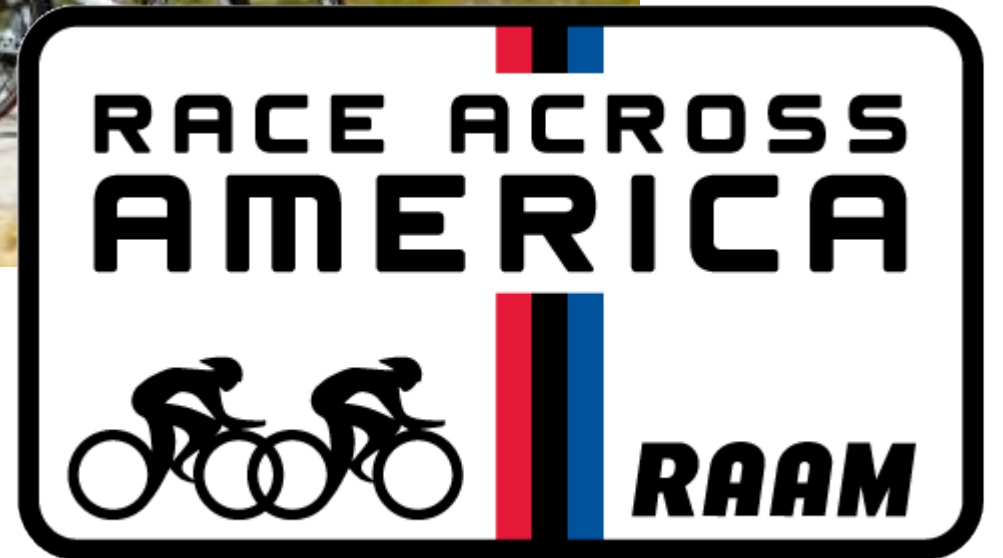
“Form”

Step 4



Strength /
Endurance

Step 4 Strength and Endurance

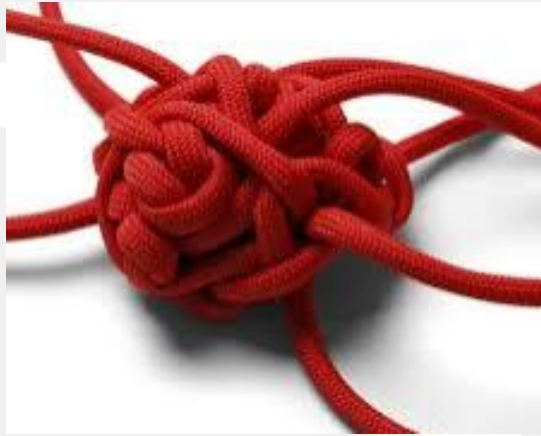


Strength Off / On Bike

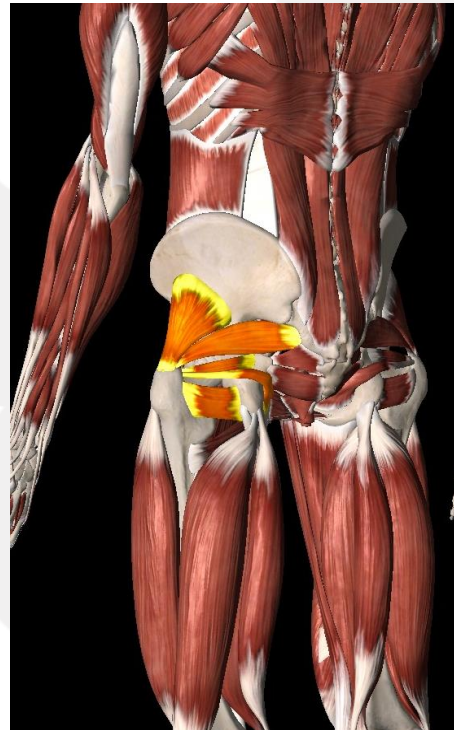
- On Bike
 - Muscular Endurance – Tempo
 - Lower Cadence Drills / Hills
- Off Bike
 - Step Ups
 - Lunges
 - Leg Presses



Have you been comprehensive?



Mobility



“Core” Control



“Form”



Strength /
Endurance

Solution Solving

*Make deposits into your **lowest** account*

you will be surprised how much it makes a difference

on your other goals!!

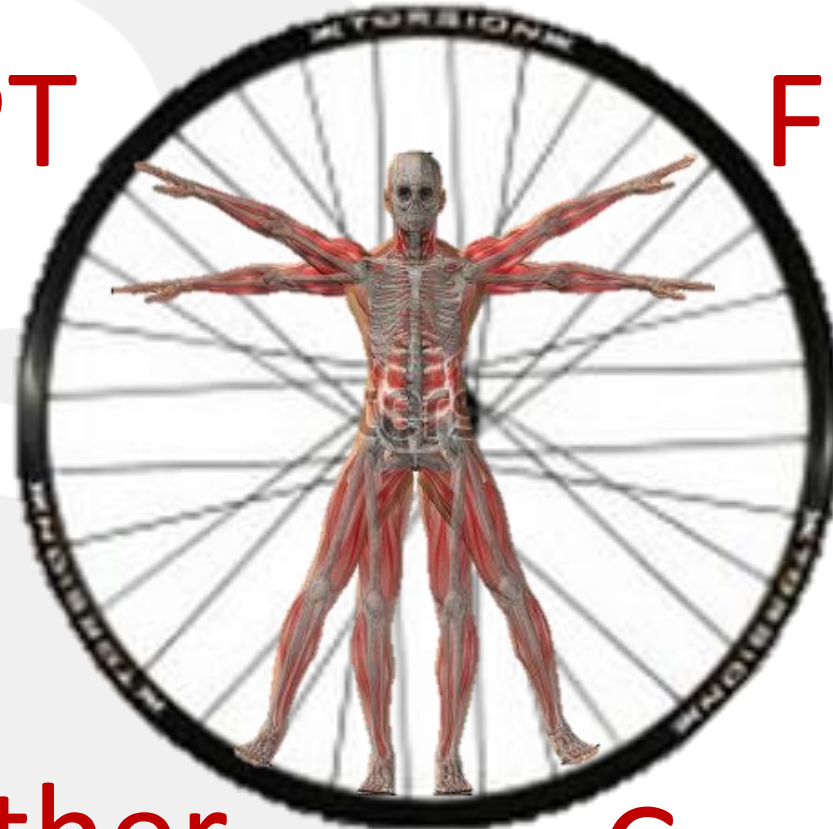


Integrated Treatment

MD

PT

Fit



Other

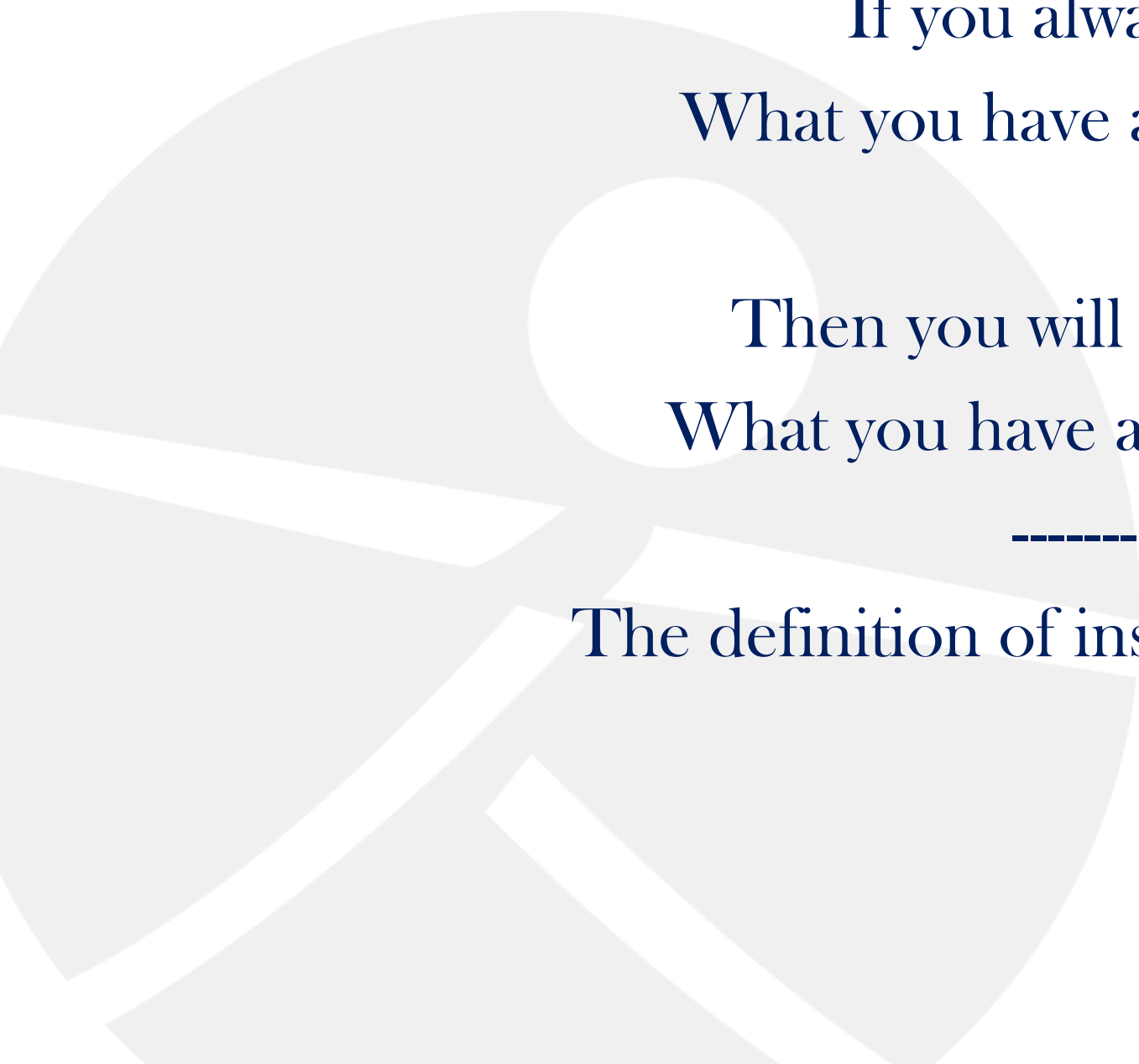
Coach



*“The consequences of today
are determined by the actions of the past.*

*To change your **future**, alter your decisions **today**.”*

– Unknown



If you always do
What you have always done

Then you will always get
What you have always gotten

The definition of insanity (Einstein)





Thank YOU!

Have Fun

-

***Keep the rubber side
down!***



Curtis Cramblett,
PT, CSCS, CFMT,
Cycling Coach

Revolutions In Fitness

We Believe in:

Empowering Human Potential



LAST SLIDE





