



**MIKE ROBERTSON**

ROBERTSON TRAINING SYSTEMS

**“Superior Athletic Development”**

Twitter: @RobTrainSystems

<b>SUPERIOR ATHLETIC DEVELOPMENT</b>

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A Little Bit About Me...



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Who is Mike Robertson?



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Who Is This For?



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My BIG Goal For YOU



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### My Early Influences



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### The Transition



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### Why Am I Teaching This Stuff?

1. I made a TON of mistakes
2. BUT I keep learning, and
3. We're getting pretty darn good results

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<h3>What You'll Discover</h3>
<ol style="list-style-type: none"><li>1. Our philosophy</li><li>2. Our thoughts on program design, and</li><li>3. Our view on training the body.</li></ol>

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<b>SECTION #1: HOW WE <i>THINK</i> THE BODY WORKS</b>

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<h3>A Thought on Models</h3>
<p>"All models are wrong, but some models are useful."  - George Box</p> 

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Common Issues In Athletes

1. Can't flex,
2. Don't have brakes, and
3. Capacity sucks

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Goal #1

To effectively teach our athletes  
how to control extension  
and better manage gravity

I.e. to better own their position

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### Key Point

Breathing affects your biomechanics and your nervous system.  
Furthermore, extension and/or sympathetic tone is not necessarily a bad thing. In fact, it drives high level performance in many ways.  
The issue lies in athletes that either:  
A) Cannot shut off their tone when necessary (i.e. to recover), and/or  
B) Carry too much tone based on the needs/demands of their sport.

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### General to Specific

- Young Athletes Need General Work
  - Basic strength
  - Basic power
  - Basic conditioning
  - You are building an athlete! (Gymnastics)

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### General to Specific

- Elite Athletes Need Specific Work
  - Specific contraction types
  - Specific conditioning
  - Specific to their unique make-up



1100-1500 change in locomotion in a soccer match! – John Cone, Ph.D.

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Goal #2
To match the training load to the level of the athlete

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General to Specific
<ul style="list-style-type: none"><li>• Elite Athletes Need Specific Work – Except When They Don't!</li></ul>


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<b>SECTION #2: GLOBAL PROGRAMMING THOUGHTS</b>

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I Got 21 Questions....

- Movement Quality (and the Trainable Menu)
- Previous Training
- Outside Stressors
- Work Capacity



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The #1 Question to Ask Yourself...

What is THE GOAL for *this* program?

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Programming Goals

- Athletes need to have enough
  - Mobility
  - Force Output
  - Work Capacity

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### The Physiological Buffer Zone



The diagram shows a vertical scale. At the top is a horizontal line labeled 'Physical Capacity'. Below it is a double-headed vertical arrow labeled 'Physiological Buffer Zone'. At the bottom of the arrow is another horizontal line labeled 'Breakdown, Injury, Pain'. To the right of the diagram is a black and white portrait of Atul Gawande.

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### You Need a Training SYSTEM

- R1 – Release
- R2 – Reset
- R3 – Readiness
- R4 – Reactive
- R5 – Resistance
- R6 – Resiliency
- R7 - Recovery



The book cover for 'The Checklist Manifesto: How to Get Things Right' by Atul Gawande features a large white checkmark on a dark background. Text on the cover includes 'THE NEW YORK TIMES BESTSELLER', 'THE CHECKLIST MANIFESTO', 'HOW TO GET THINGS RIGHT', and 'BY ATUL GAWANDE'.

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### The Evolution of my Athletic Development

R1 – Release		
R2 – Reset	—————>	Breathing and Position
R3 – Readiness		
R4 – Reactive	—————>	Lee, Charlie, Derek, James
R5 – Resistance		
R6 – Resiliency	—————>	Joel, Patrick, Mark
R7 - Recovery		

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### Every Training Session is Valuable

- So maximize it!
- How do we do that?
  - Assess readiness every session
    - HRV example
    - Grip strength
    - VBT (bench press, squat)
    - 4-Jump Test

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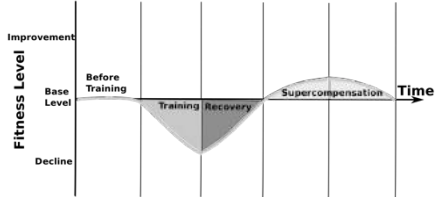
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### But Not Every Training Session is Hard

1. Adaptive
2. Stimulative/Restorative



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### Programming Should be *Dynamic*

How long until you "change things up?"



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<b>SECTION #3: HOW TO TRAIN THE BODY</b>

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<b>Areas We'll Focus On...</b>
<ul style="list-style-type: none"><li>• The Quads</li><li>• The Hamstrings</li><li>• The Lower Leg</li></ul>

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<b>Let's Agree on One Thing...</b>
Can we please get rid of the term "Quad Dominant"?

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What Do You Think When You Hear the Term "Quads"?



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What's Really Going On?

Quad dominance implies the quads are consciously active – when in fact it's quite the opposite.

The rectus femoris is short, but positionally engaged due to an anterior pelvic tilt, anterior COG, and ultimately, suboptimal position.

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So What Do the Quads Do?

Not just knee extenders –  
But eccentrically control knee flexion!

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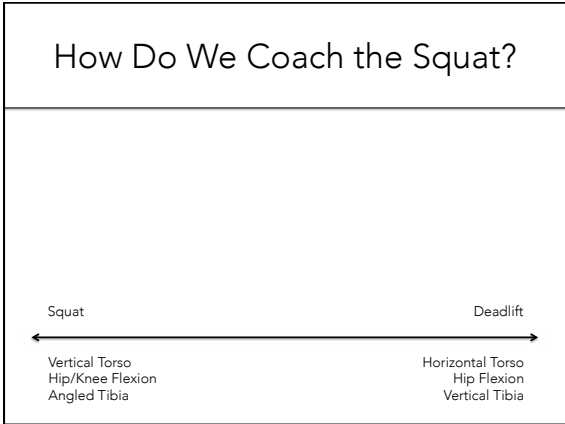
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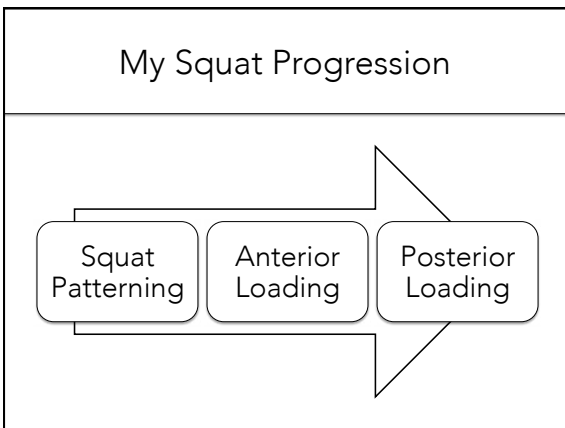
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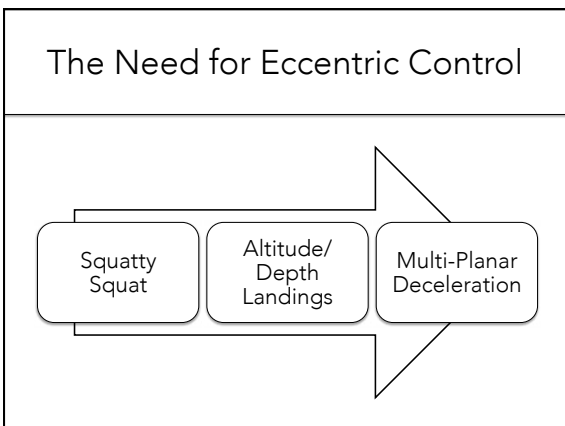
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## Training the Quads

- The Split-Squat

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## What Do You Think When You Hear the Term "Quads"?

Don't just think acceleration and power -  
Think *deceleration* and *level changers*

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## Let's Talk Hamstrings



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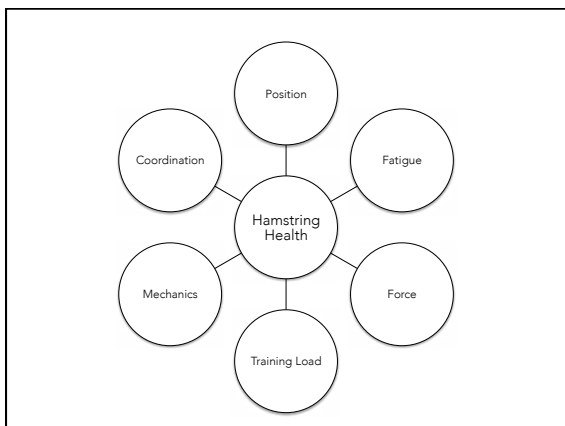
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### What Do The Hamstrings Do?

- Open Chain (i.e. sprinting)
  - Concentric – Hip extension + knee flexion
  - Eccentric – Hip flexion + knee extension
- Closed Chain (i.e. squatting)
  - Reins

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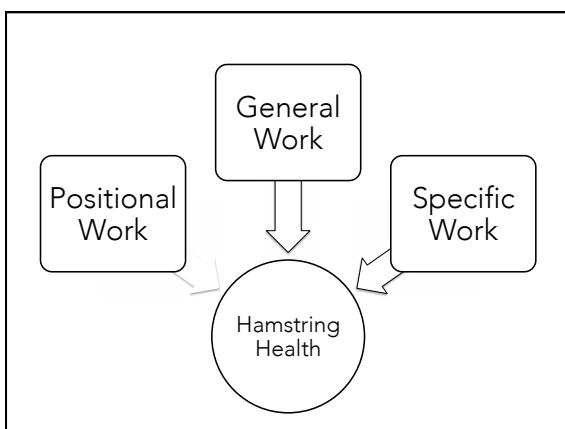
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<h3>Hip-Focused Hamstring Work</h3>
<ul style="list-style-type: none"><li>• RDL Progressions</li></ul>

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<h3>Knee-Focused Hamstring Work</h3>
<ul style="list-style-type: none"><li>• Integrated Knee Flexion Progressions</li></ul>

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<h3>Sprint Training!</h3>
<ul style="list-style-type: none"><li>• Rules for Reintroduction<ul style="list-style-type: none"><li>– VERY short distances</li><li>– Full recovery in between bouts</li><li>– Do NOT allow fatigue to become a factor early<ul style="list-style-type: none"><li>• Think stress tolerance FIRST, then rebuild capacity</li></ul></li></ul></li></ul>

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<b>SUMMARY</b>

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Summary
<ul style="list-style-type: none"><li>• Our Philosophy</li><li>• How we program</li><li>• How we coach</li></ul>

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<b>THANK YOU!</b>

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