

I'm, Like, Super Important

Brief History:

- BA Health Education
- Co-Founder Cressey Sports Performance (2007-2015)
- CORE (2015 – Present)
- I write stuff

Likes:

- Lifting Heavy Things
- Cheese
- Jason Bourne
- Kitty Cuddles
- 90's Hip-Hop

Dislikes:

- Talking About Feelings



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You'll Be Smarter in 30 Minutes Because...

- You'll understand and respect anatomical variances with regards to squat & deadlift set-up and execution.
- You'll Understand Passive vs. Active Assessment and how both can help navigate programming considerations for every client

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A Nod to Those Who's Info I'm "Borrowing"

Wink-Wink

- Dr. John Rusin
- Dr. Ryan DeBell
- Dean Somerset
- Sue Falsone
- Dr. Stuart McGill
- Alex Kraszewski
- Bret Contreras
- Han Solo

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Textbook Technique Doesn't Exist



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What's Happening Here?



Courtesy: iStockphoto / 123RF Stock Photo

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Should These People Squat & DL the Same?

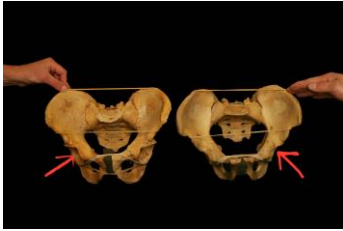


Courtesy: PaulGibby.com

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Hip Socket Location

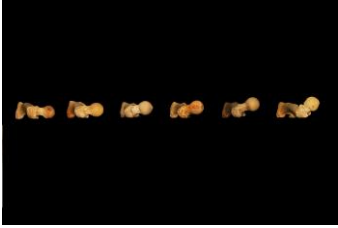


Courtesy: PaulGriley.com

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Femoral Neck Torsion





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Motion Diameter

Shallow Socket Thin Femoral Neck	Thick Socket Thick Femoral neck
	
Big Cone Diameter	Small Cone Diameter

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Alignment Affects ROM

Ross et al (2014), AJSM, vol 42, 10: 2402-2409

- 3D Modeling of Pelvic Motion from x-rays of 50 subjects showed increase in anterior pelvic tilt of 10 degrees...
- Decreased Flexion by 6 Degrees
- Decreased Hip IR by 15 Degrees
- Decreased Adduction by 8.5 Degrees
- Increased Contact With Positions of Impingement



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How Is This Relevant?

- Posterior tilt increased these ROMs
- Decreased Impingement Contact



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Trunk Posture and Hip Flexion



- More anterior tilt may require more spinal motion during squatting exercises.
- "Nudge" people with more posterior tilt TOWARDS neutral



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Your Eyes Are Actually a Splendid Assessment Tool – Use Them.



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Position Affects Load

Lumbar spine loads during the lifting of extremely heavy weights

	Sumo	Conventional
Barbell load	205.5	205.5
Height	108 in (8' 6")	108 in (8' 6")
L4/L5 moment*	105.5 lb	105.5 lb
EMG	105 in (24.5)	105 in (24.5)
Disc compression	91,425	11,730
EMG	105 in (24.5)	105 in (24.5)
Lumbar shear*	2387	3002
EMG	105 in (24.5)	105 in (24.5)
Joint shear	1025	1642
EMG	105 in (24.5)	105 in (24.5)



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All of This to Say...

I'm Not a Wizard



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Active & Passive
Assessment Crucial

- Gives us information.
- Do They Match?
- If Not: Stability or Mobility Issue?

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What's the Point?

- Everyone is different
- Not Everyone is going to Squat or DL the same way
 - Depth, stance, etc
- Forcing ROM on someone who can't achieve it is going to result in bad things.
 - Like a baby seal dying.
- Experiment with foot position, width, depth, front/back alignment is necessary to see what the best fit is



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Thank You!



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