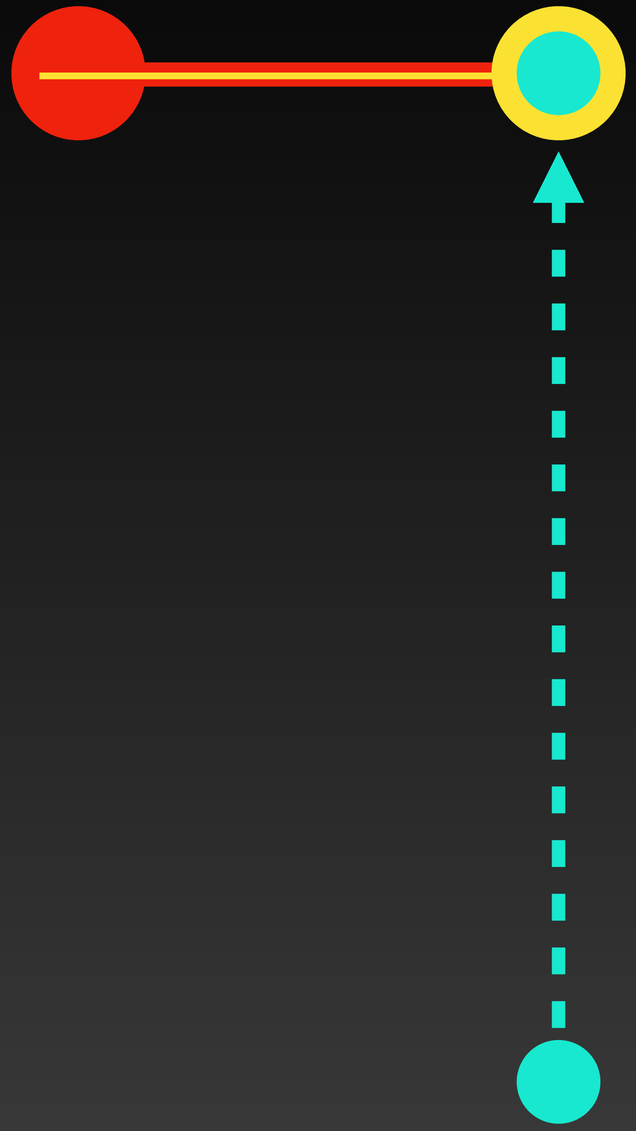
ESPERIENZE SULLO SVILUPPO DELLA FORZA DA ALTRE DISCIPLINE SPORTIVE

Matteo Artina - 19/6/2020


Cortina
Obex


ITA
PyeongChang

MECCANICA ARTICOLARE



RITMO

VETTORE

(DI FORZA)

Squat vs. Hip Thrust

EFFECTS ON PERFORMANCE

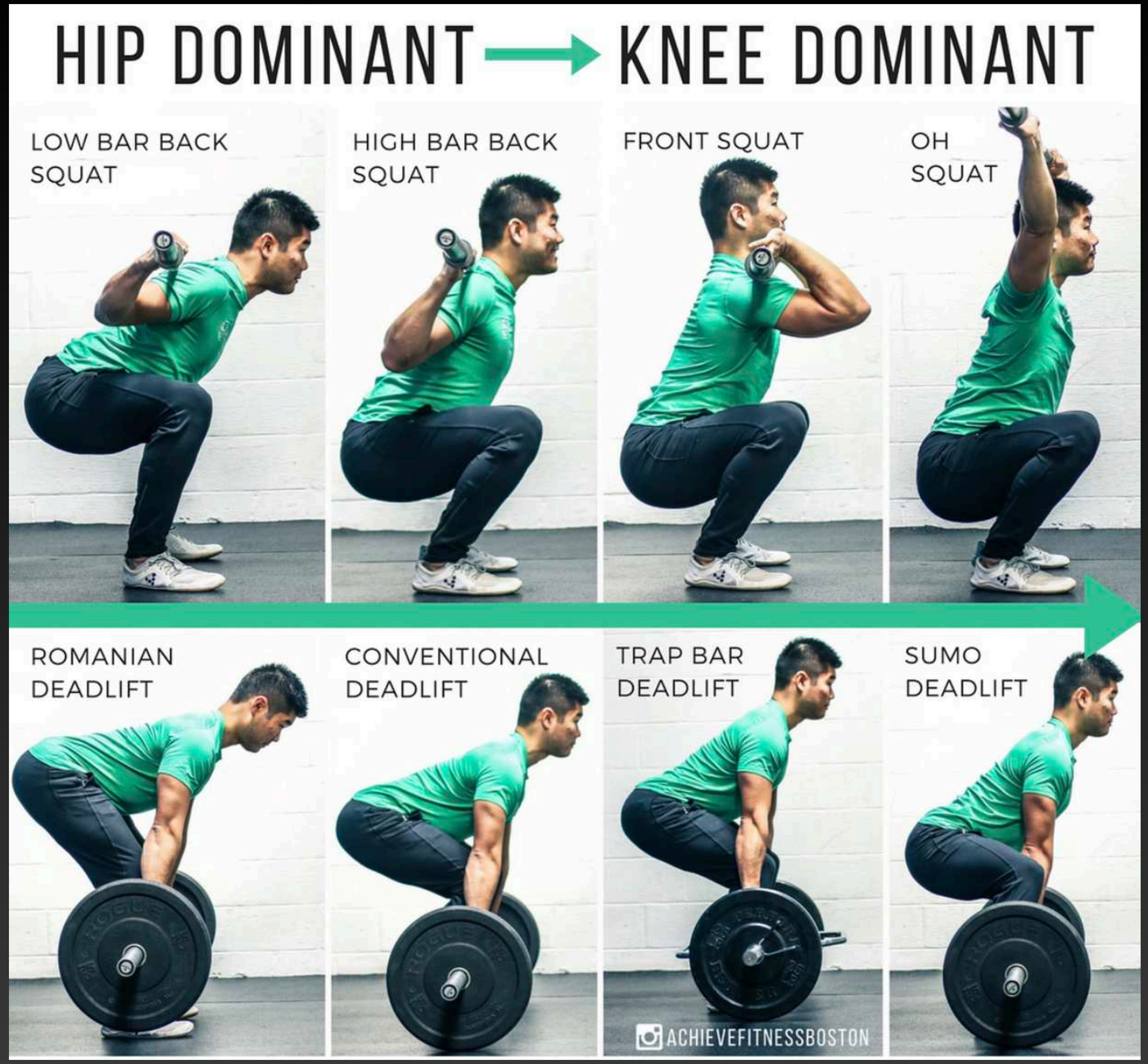
NSCA® NATIONAL STRENGTH AND CONDITIONING ASSOCIATION

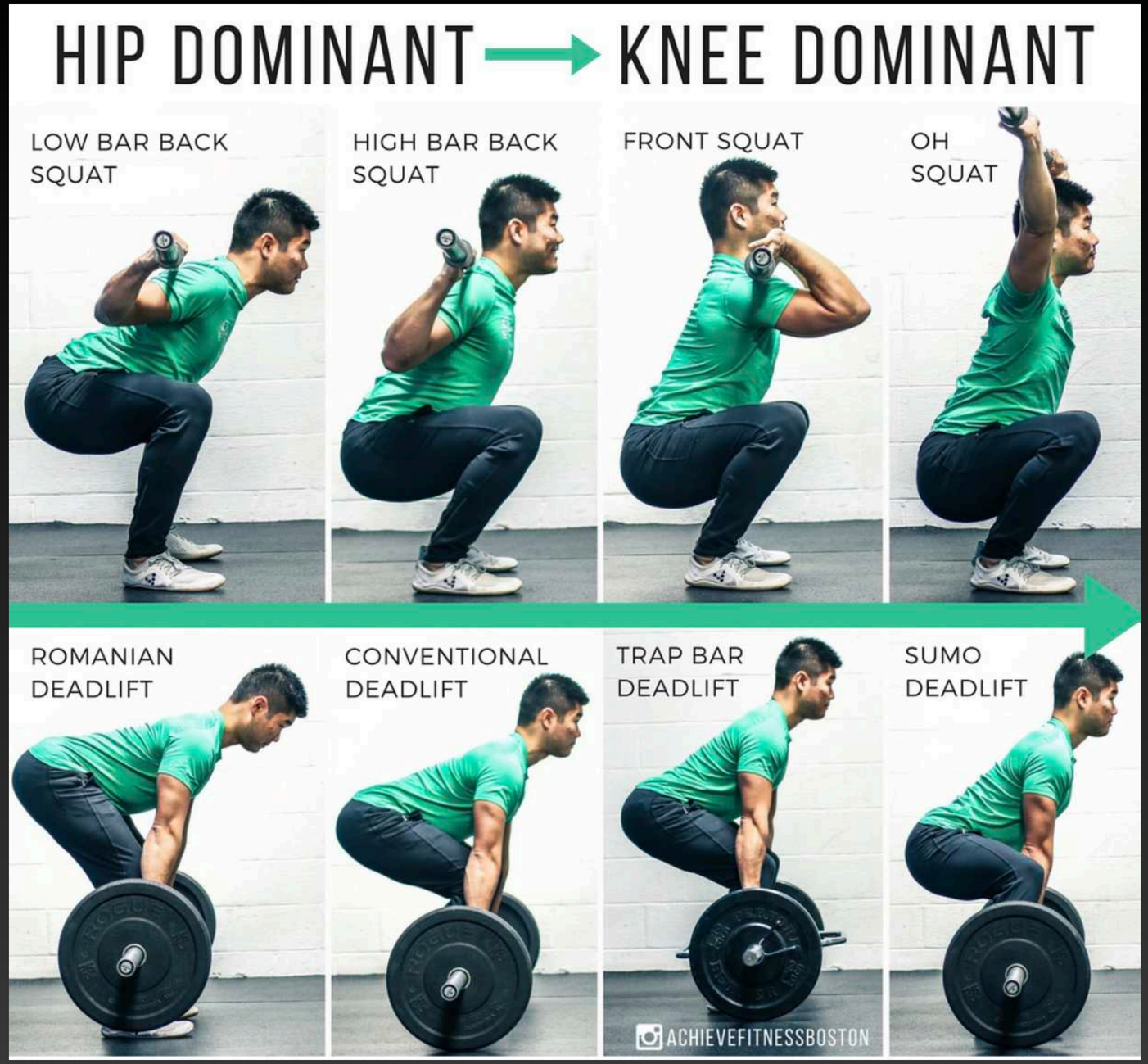
By Bret Contreras et al
JSCR 2017

24 adolescent athletes assigned to a front squat or a hip thrust training group

FRONT SQUAT VS **HIP THRUST**

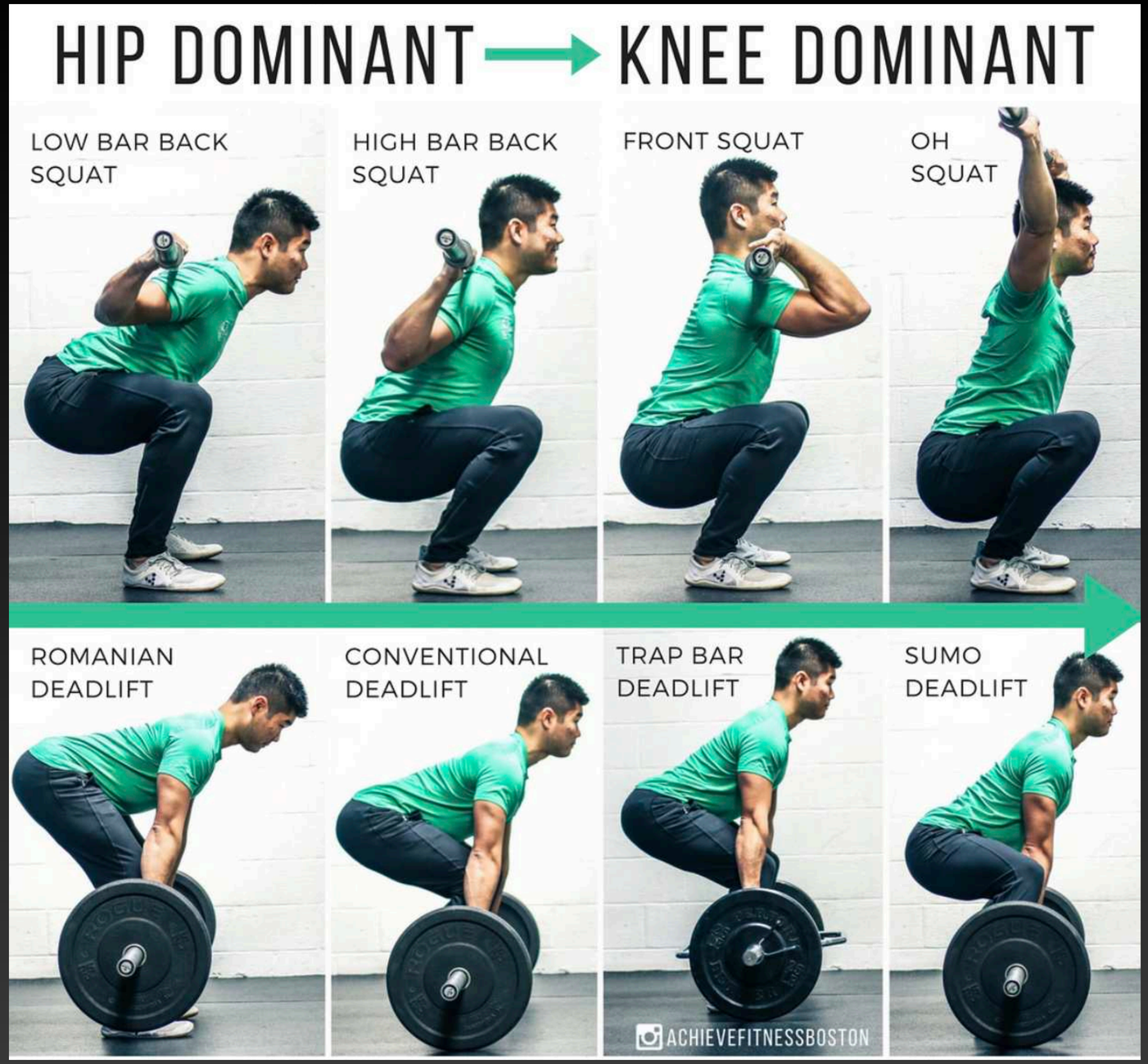
FRONT SQUAT	Results	HIP THRUST
+7.30%	VERTICAL JUMP	+3.42%
+1.71%	HORIZONTAL JUMP	+2.38%
+0.10%	10m SPRINT TIME	–1.05%
–0.66%	20m SPRINT TIME	–1.67%


HIP DOMINANT → KNEE DOMINANT
LOW BAR BACK SQUAT
HIGH BAR BACK SQUAT
FRONT SQUAT
OH SQUAT
ROMANIAN DEADLIFT
CONVENTIONAL DEADLIFT
TRAP BAR DEADLIFT
SUMO DEADLIFT
ACHIEVEFITNESSBOSTON



VETTORE IDENTICO

MOVIMENTO DIVERSO



VETTORE IDENTICO

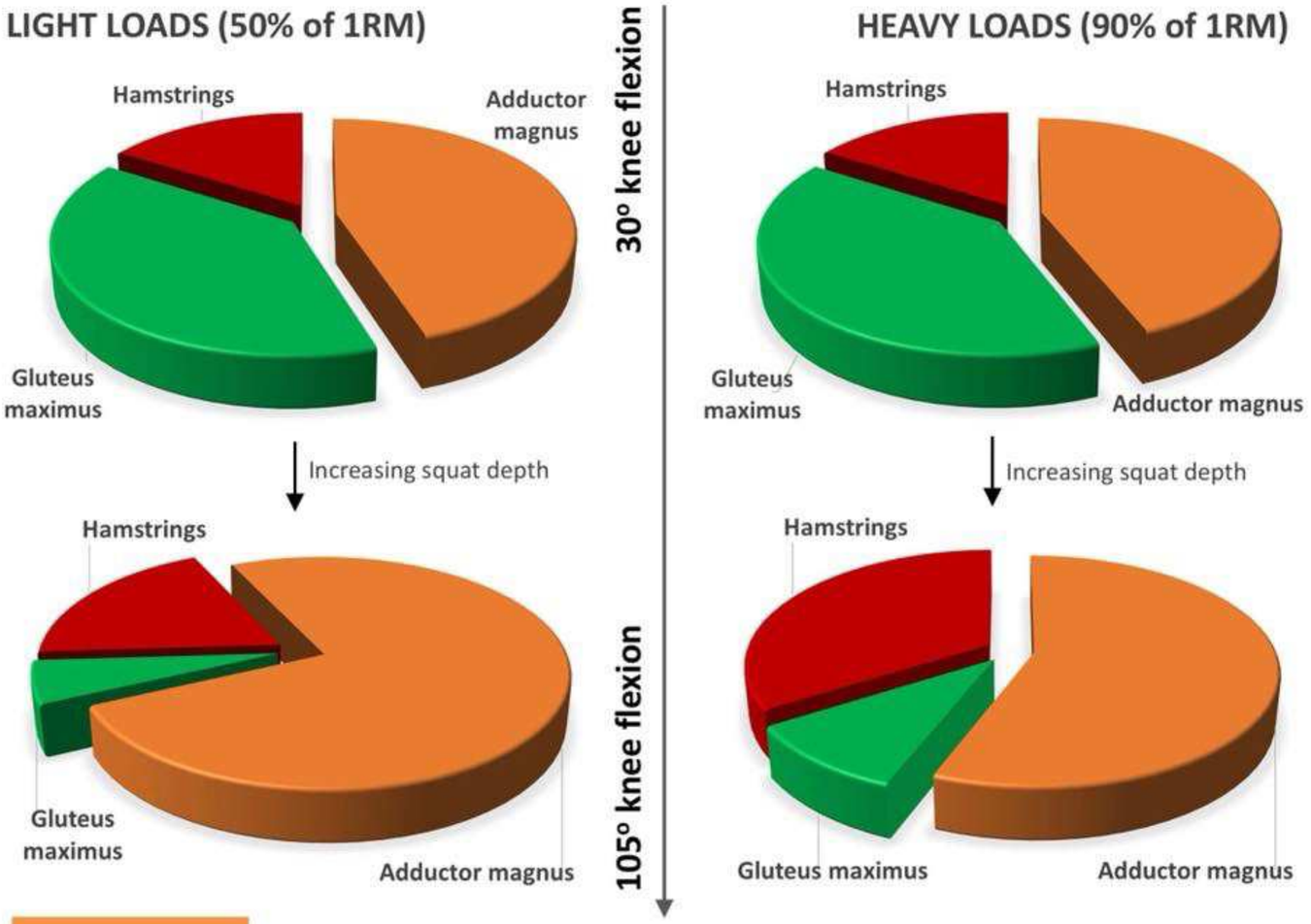
↓

MOVIMENTO DIVERSO

↓

APPRENDIMENTO

The proportional contribution of the hip muscles to hip extension torque changes with squat depth and load (percentage of 1RM)

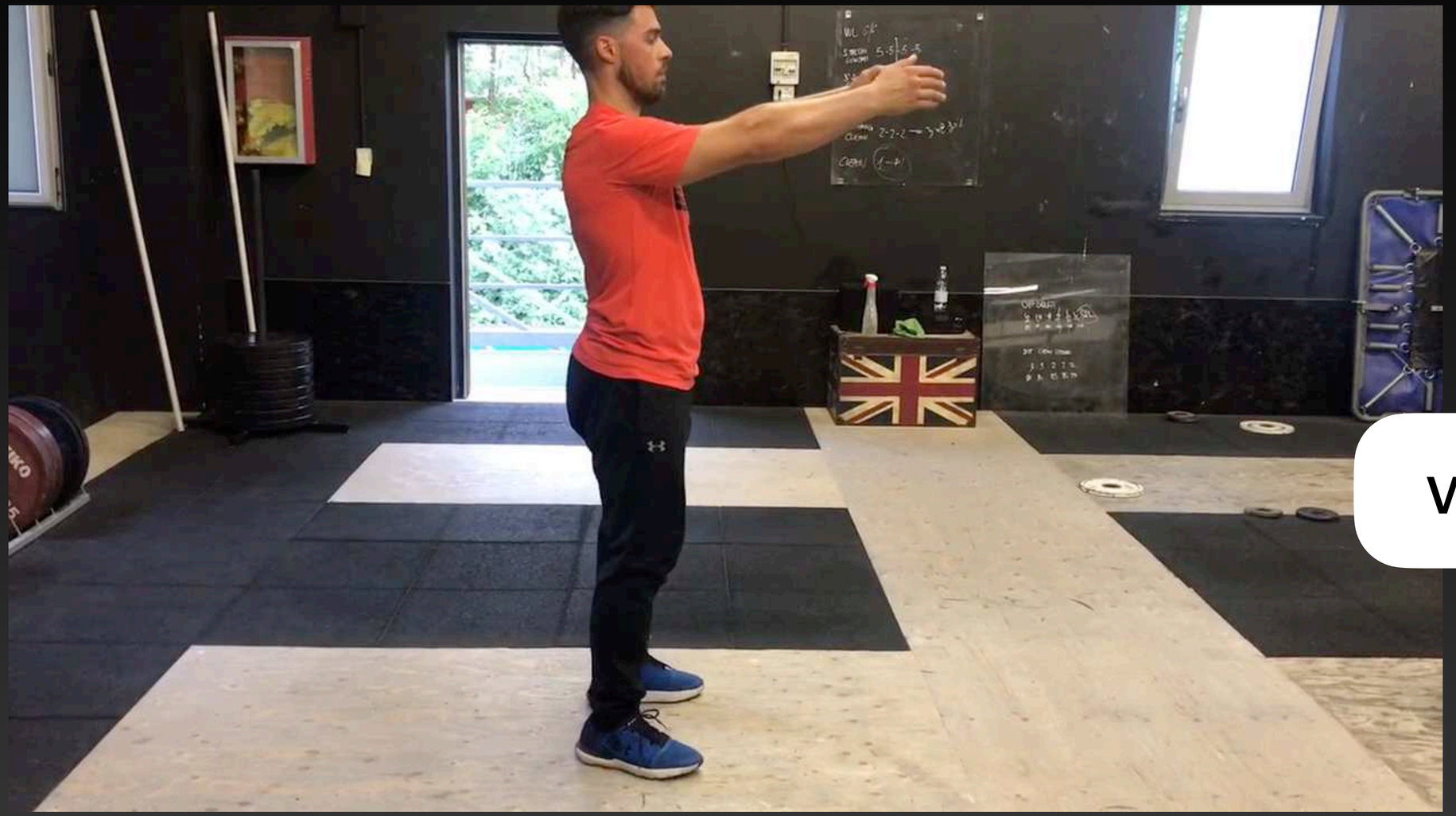


SUMMARY

With ↑ squat depth, the gluteus maximus contributes less to hip extension net joint moment, with both light and heavy loads. The hamstrings only ↑ their contribution with ↑ squat depth with heavy loads, suggesting that this occurs because the adductor magnus cannot provide sufficient force. At heavy loads, the force required from the quadriceps must therefore ↑ substantially, because of the ↑ knee flexion moment produced by the ↑ hamstrings involvement.

Based on: Vigotsky, A. D., & Bryanton, M. A. (2016). Relative Muscle Contributions to Net Joint Moments in the Barbell Back Squat. *40th Annual Meeting of the American Society of Biomechanics, Raleigh, NC, USA.*

Strength & Conditioning Research



SQUAT

VETTORE VERTICALE

HINGE

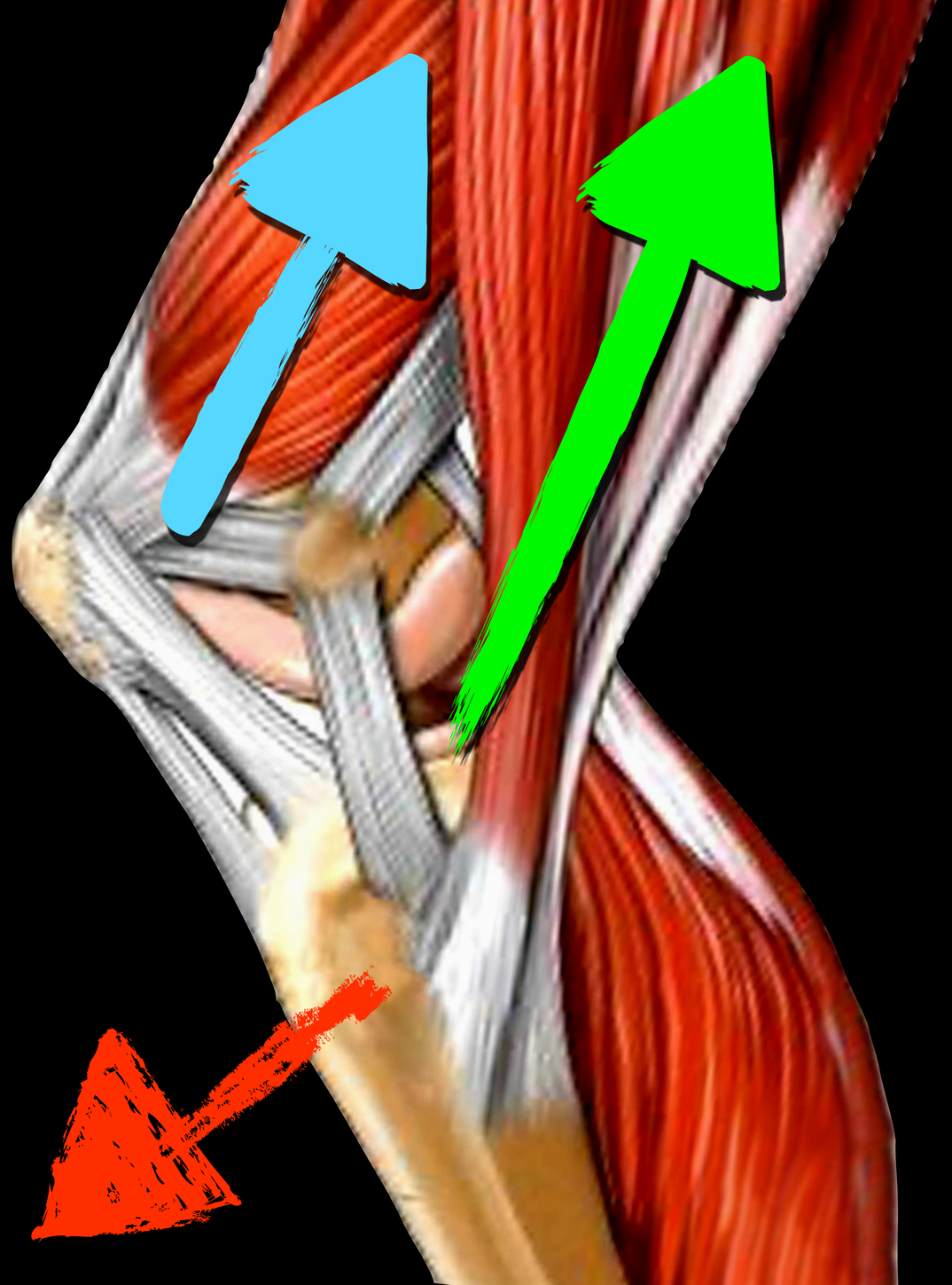
VETTORE ORIZZONTALE

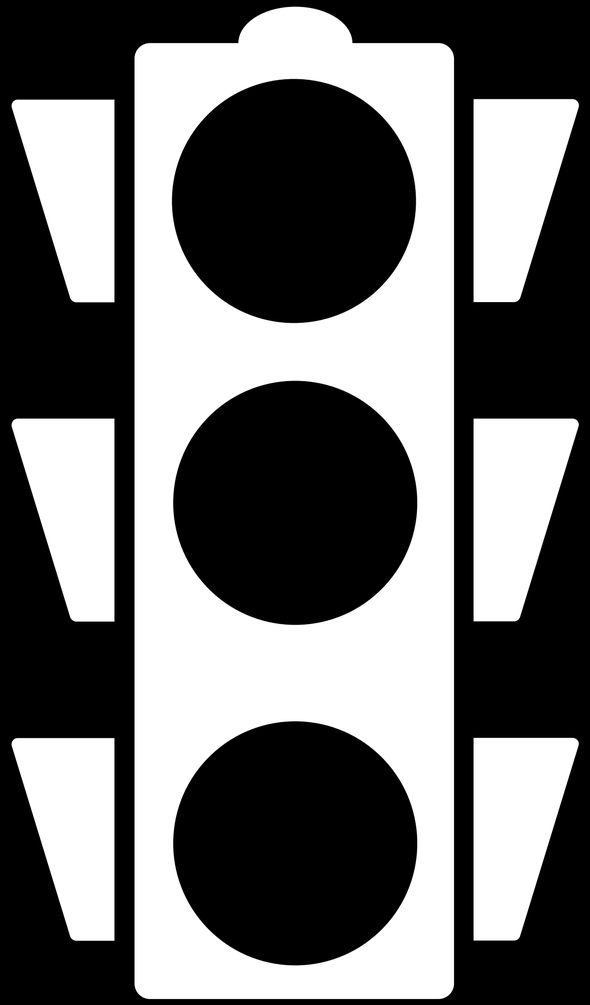
ON-OFF

CARICO

CO-CONTRAZIONI

- CONTRAZIONE “MOTRICE”
- CONTRAZIONE “DI REGOLAZIONE”





ON-OFF

CARICO

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- CONTRAZIONE “MOTRICE”
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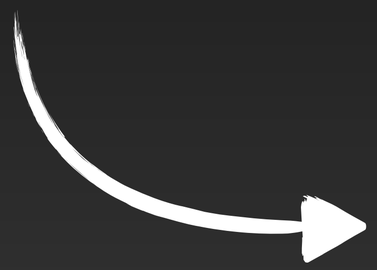
ON-OFF

CARICO



SAPERSI DISATTIVARE

ON-OFF

ON-OFF

CARICO

VELOCITA’

ON-OFF

VELOCITA’

ON-OFF

VELOCITA’

- ATTIVAZIONE AGONISTI-ANTAGONISTI
- CAPACITA’ DI RITMIZZAZIONE


UNDER ARMOUR

MOBILITA’ TORACICA

CTRL MOTORIO SCAPOLARE

mm STABILIZZATORI ATTIVI

...

GRAZIE