Anatomy & Physiology: Muscles—Plantar Interossei.

## STRUCTURE.

- Origin: metatarsals 3-5.
- Insertion: medial side of proximal phalanges of toes III-V.

## FUNCTION.

- Concentric action: adduction and flexion of proximal metatarsophalangeal joints; extension of toes at interphalangeal joints.
- Reverse mover action: adduction of metatarsals of toes 3-5 at MTP; flexion of metatarsals at MTP; extension of proximal phalanges at PIP and DIP.
- Eccentric action: controls/restrains/decelerates abduction, extension, and flexion of toes 3-5 at MTP and IP joints.
- Isometric action: stabilizes MTP, PIP, and DIP joints.
- Innervation: lateral plantar nerve.
- Arterial supply: branches of plantar arch.

## CLINICAL SIGNIFICANCE.

## References

Biel, A. (2015). Trail guide to the body: A hands-on guide to locating muscles, bones and more.

Clark, M., Lucett, S., Sutton, B. G., & National Academy of Sports Medicine. (2014). *NASM essentials of corrective exercise training*. Burlington, MA: Jones & Bartlett Learning.

Jenkins, G., & Tortora, G. J. (2012). *Anatomy and Physiology: From Science to Life, 3rd Edition International Stu.* John Wiley & Sons.

Muscolino, J. E. (2017). The muscular system manual: The skeletal muscles of the human body.