



YogaAnatomy.org

Leslie Kaminoff's  
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SOMOS YOGA SEPTEMBER 6-8, 2024:

# Leslie Kaminoff

Re-Imagining Alignment: A Weekend of Inquiry Based Yoga Practice

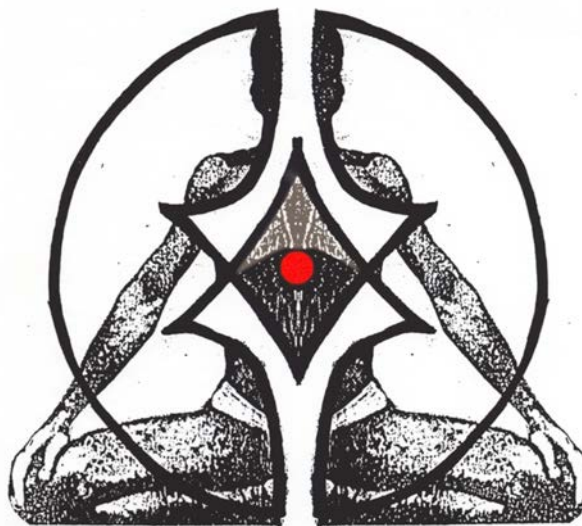
*Prana apana samayogah pranayamah iti iritah.*

Pranayama is the balanced joining of the in-breath and the out-breath.

YOGA YAJNAVALKYA 6:2

## SESSIONS

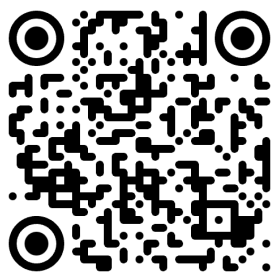
- ▶ Awakening Our Inner Resources: Proprioception and Interoception in Yoga Education
- ▶ Poses Don't Have Alignment, People Have Alignment
- ▶ Alignment Re-Imagined
- ▶ The Warrior Series: A Hands-Free Vinyasa Practice



Prana logo by Leslie Kaminoff based on the photo of T. Krishnamacharya from "The Heart of Yoga"

Still photos may be posted to social media if you tag lkaminoff (Facebook)/leslie.kaminoff (Instagram).

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- workshop page: [yogaanatomy.org/somos-24](https://yogaanatomy.org/somos-24)



- survey: <http://y-an.org/student>
- [breathingproject.com](https://breathingproject.com)

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## Awakening Our Inner Resources: Proprioception and Interoception in Yoga Education

**Proprioception is the sense of self-movement, force, and body position**

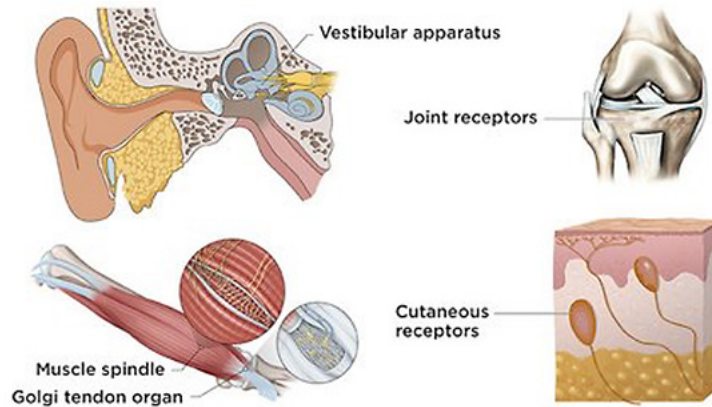
**Proprioceptors are located in muscles, tendons, and joints throughout the body.** These receptors are mechano-sensory neurons that send information to the brain about body position and movement.

**Most vertebrates possess three basic types of proprioceptors:**

1. **muscle spindles**, which are embedded in skeletal muscles,
2. **Golgi tendon organs**, which lie at the interface of muscles and tendons, and
3. **joint receptors**, which are low-threshold mechanoreceptors embedded in joint capsules.

# PROPRIOCEPTION

**Several important receptors provide information about the state of the body parts in relation to each other and relative to the environment.**



*Adapted from Motor Learning and Performance, Sixth Edition  
by Richard A. Schmidt and Timothy D. Lee © Human Kinetics*

Proprioceptors are densely packed in areas that require fine motor control and detailed spatial awareness, such as the hands, which have the highest concentration of proprioceptors, particularly the fingers, which are involved in complex tasks that require precise coordination.

Another area with a high concentration of proprioceptors is the feet, especially the soles, which help maintain balance and posture. The neck also has a significant concentration of proprioceptors, as it plays a crucial role in head movement and positioning, which are essential for orientation and balance.

In addition to proprioception, other ways the body senses movement and position include:

1. **Eyes:** Visually monitors the position of limbs in space
2. **Skin:** Provides tactile feedback about body positioning, skin deformation, and contact with objects
3. **Semicircular canals:** In the ear, these canals detect rotation through the inertial lag of fluid on sensory hairs

Proprioception can be trained, to some degree, similar to other senses. For example, dancers and figure skaters can learn to keep from becoming disoriented while spinning.

Proprioception can be permanently lost or impaired as a result of genetic conditions, disease, viral infections, and injuries. For instance, patients with joint hypermobility or genetic conditions that result in weak connective tissue throughout the body, like Ehlers-Danlos or Marfan Syndrome, have chronic impairments to proprioception.

In rare cases, a viral infection can selectively destroy proprioception, as in the famous case of Ian Waterman, subject of the documentary “The Man Who Lost His Body.” Waterman painstakingly regained control of his limbs and body by consciously planning their movements, relying solely on visual feedback. The documentary clarifies that he can still sense pain and temperature, indicating that he specifically lost *proprioceptive* feedback, but not tactile and nociceptive.

# Poses Don't Have Alignment, People Have Alignment

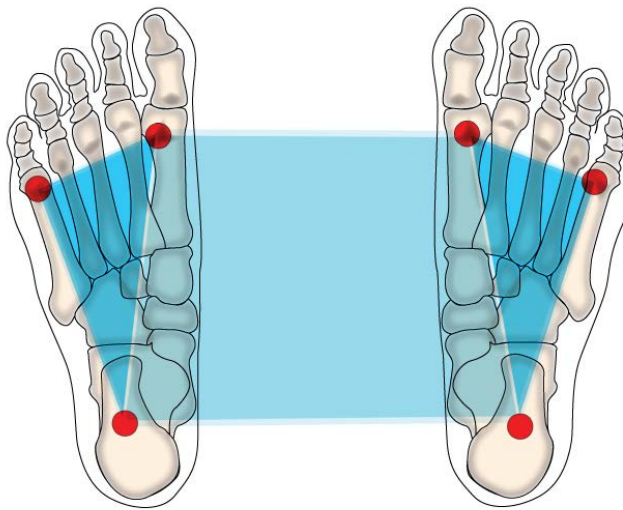
## Principles:

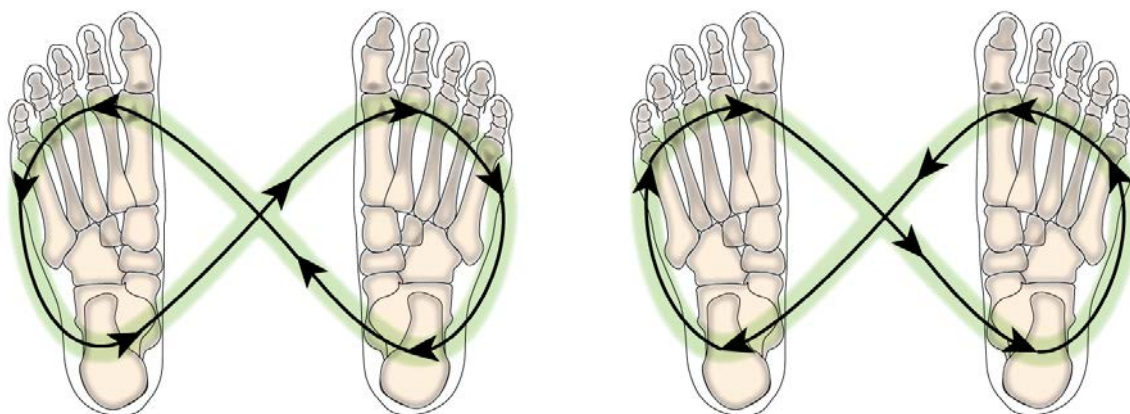
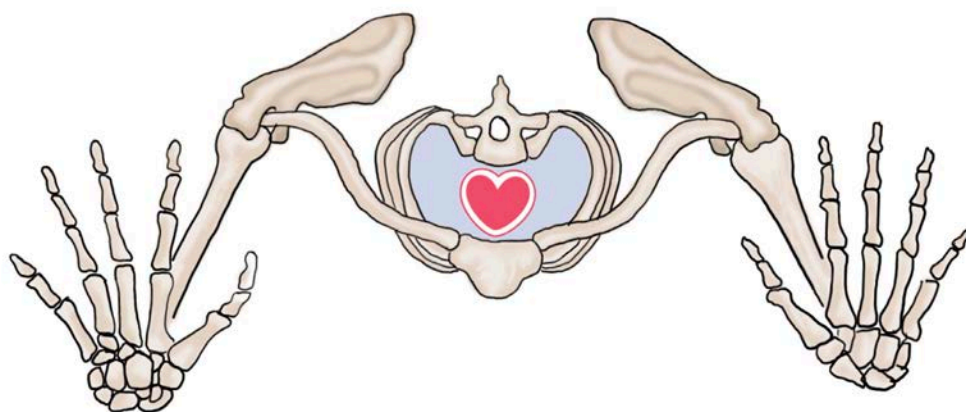
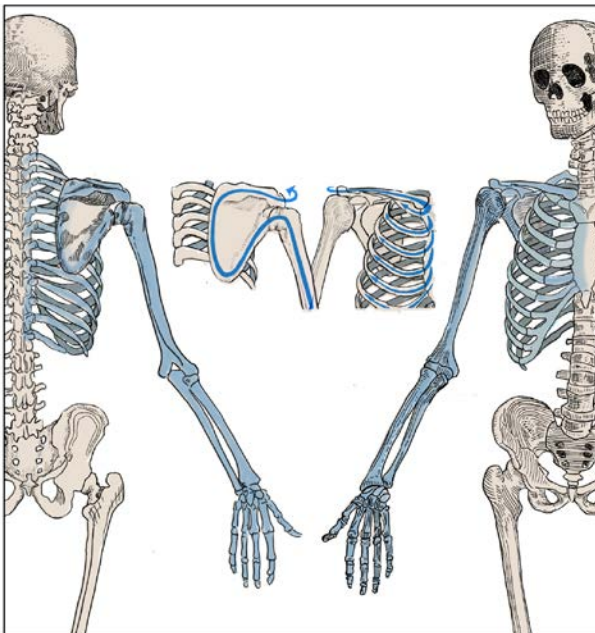
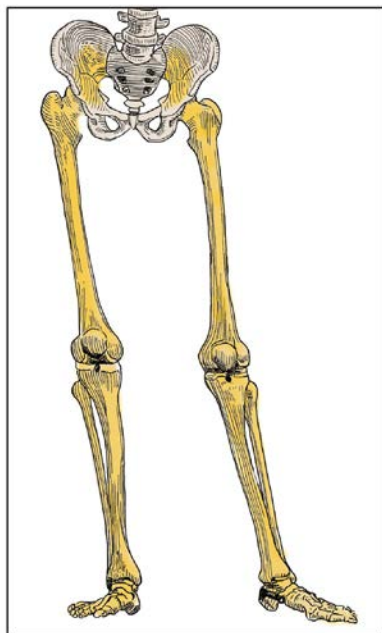
- ▶ **Asanas** don't have alignment – people do.
- ▶ **An asana** only exists when an individual places their body into a shape.
- ▶ **Healthy movement** is well-distributed - a little bit of movement coming from a lot of places.\*
- ▶ **Unhealthy movement** is too much movement coming from too few places repeated too many times (repetitive stress).
- ▶ **Skeletal alignment** is a clear pathway of weight passing through balanced joint space.\*
- ▶ **Muscle action** in asana is effective when it positions the bones to produce functional skeletal alignment.\*

## Alignment Cues to re-imagine:

- ▶ Stand with the feet parallel
- ▶ Square the pelvis
- ▶ Tuck the tail
- ▶ Always lengthen the spine
- ▶ Draw the shoulder blades down the back
- ▶ Always place the bent knee over the ankle
- ▶ “Open” the hips
- ▶ Heart opening
- ▶ “Knit” the ribs together

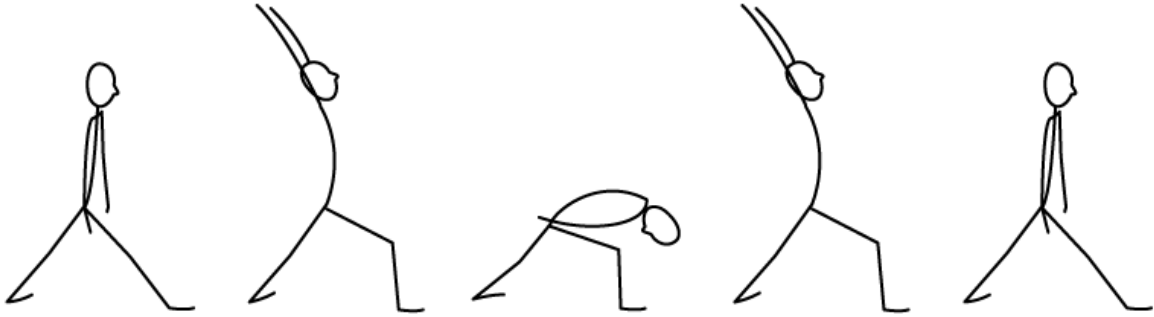
*\*These definitions were formulated by Amy Matthews as inspired by her work with Bonnie Bainbridge Cohen*







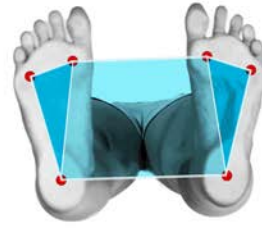
# The Warrior Series: A Hands-Free Vinyasa Practice



Tadasana  
(narrow stance)

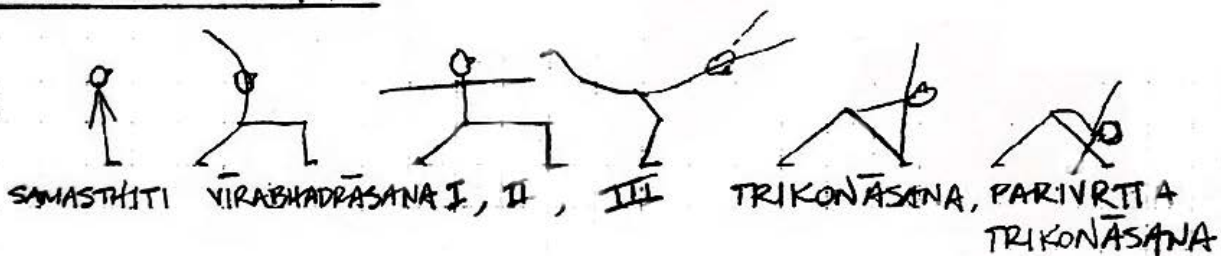


Samasthiti  
(wide stance)



# "THE WARRIOR SERIES"

MAIN  
ĀSANAS



COUNTERPOISING  
ĀSANAS

