# Anatomy Day 1

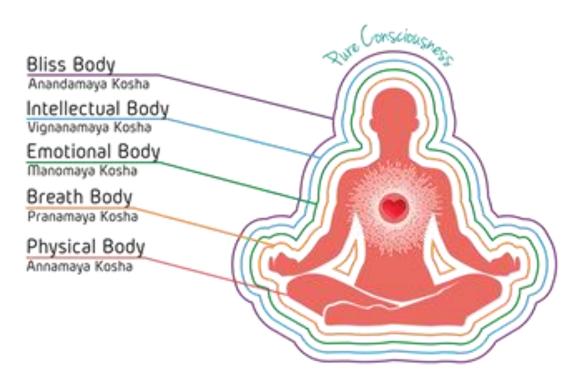
Natalie van Moorsel Hatha (Flow) Yoga Teacher Training

Anatomy for yoga teachers
Anatomy and injuries
All bodies are different

#### WHY DO WE STUDY ANATOMY?

#### Anatomy for yoga teachers

We need to be able to practice safely ourselves and offer a safe practice to our students. An understanding of holistic anatomy is a tool in us helping to achieve this.



### The goal of learning anatomy

- Teach a safe class and prevent yoga injuries
- Learn the concept of ease, dis-ease and homeostasis
- Understand function to understand dysfunction
- Develop language for cueing
- Learn to listen: cues and language of the body
- Understanding diversity, every body is unique
- Recognize differences in proportion and orientation
- Learn the difference between tension and compression
- Training your eyes to see your students
- Create modifications for poses

#### Anatomy and Ahimsa

- Give students time to be aware of their experience
- Students are responsible for their own safety and must honor their inner teacher
- As teachers we help keep our students safe
- Breath test: Practices should allow mindfulness of calm breath
- Smile test: Practices should allow smiling (unclenching the jaw)
- Practice should never increase injury symptoms
- Sutra 2.46 Sthirasukhamasanam

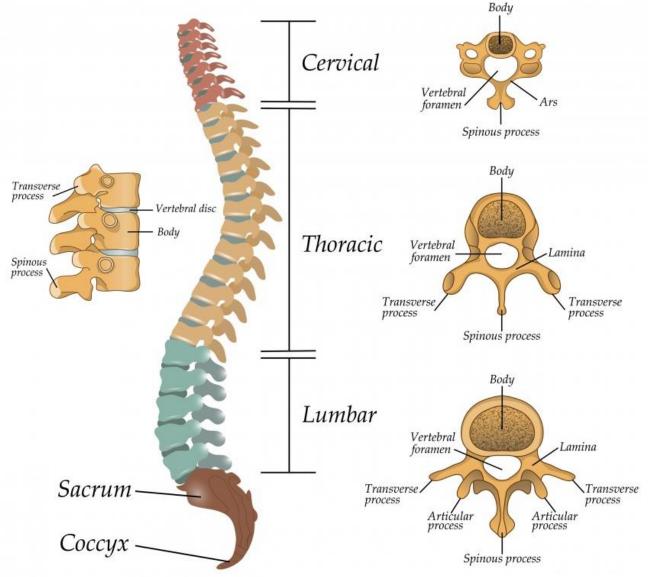
#### All bodies are different



Parts of the spine
Lordosis and kyphosis
Discs
Injuries

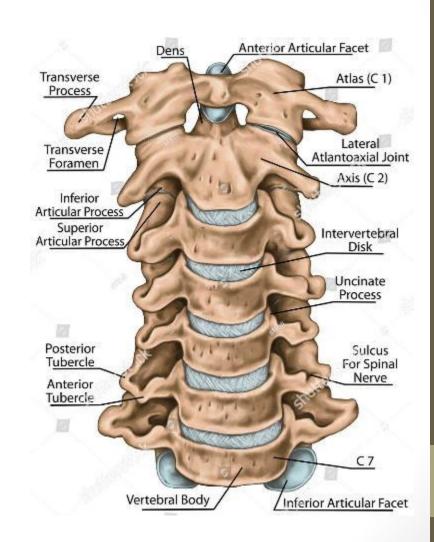
#### THE SPINE

# The Spine (p.19)



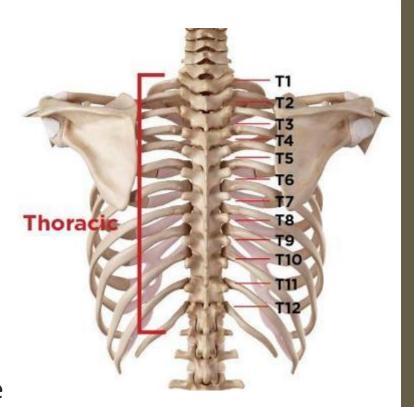
#### The cervical spine

- Focus on maintaining normal lordosis
- C1 Atlas: Occupational joint
- C2 Axis: Dens point
- Movement of C-spine can directly affect blood supply to the brain
- Muscles along the C-Spine:
   Scalenes (p. 199+215)
- https://youtu.be/ajL8D9JIja8



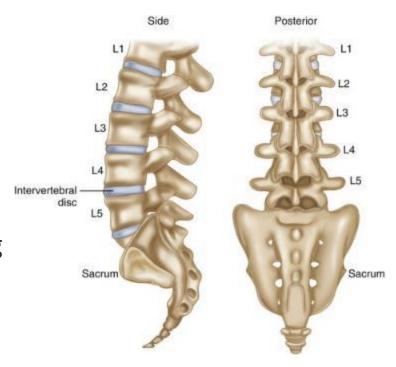
#### The thorasic spine

- The T-spine and ribs protect the main organs in the upper torso and help us breathe
- Attachment point for the ribcage to protect the heart and lungs
- Flexion, extension, lateral flexion and rotation (all twists are initiated in the thorasic spine)
- Movement through breath nourishes the discs in the T-Spine



#### The Lumbar and Sacral spine

- Vertebrae in the L-spine are shaped for mobility and are designed to be a weight bearing structure
- Backbending works on a thoracic and lumbar relationship through mobilizing the spine in the direction of extension

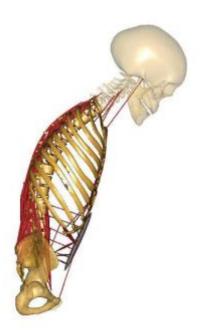


### Movement of the spine (p.116)

- Flexion
- Extension
- Rotation
- Lateral flexion



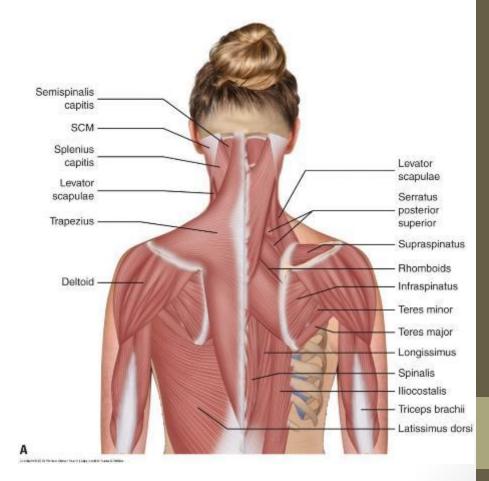




### Muscles for the spine (p114-115)

The muscles of the back are slow twitch or **tonic**, this means we don't command them and they are working for us, they are resistant to fatigue and capable of doing a lot of work. Phasic muscles only act when we tell them to (biceps)

Reciprocal inhibition: As one muscle tenses the other relaxes. When the abs contract the back muscles relax

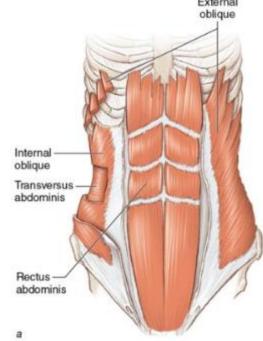


#### Core muscles (p. 118-119)

- Connecting us to our sense of power
- Helps us gain stability and ease in asana
- Deep and superficial core: the deeper local system switches on just before you start moving, stabilizing the spine. The superficial system deals with extra loads from moving bones

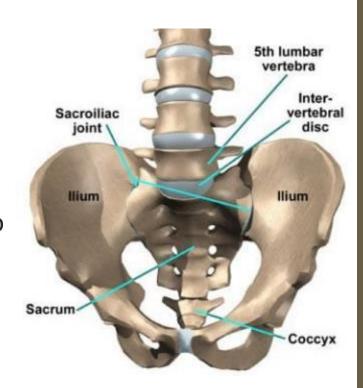
and limbs

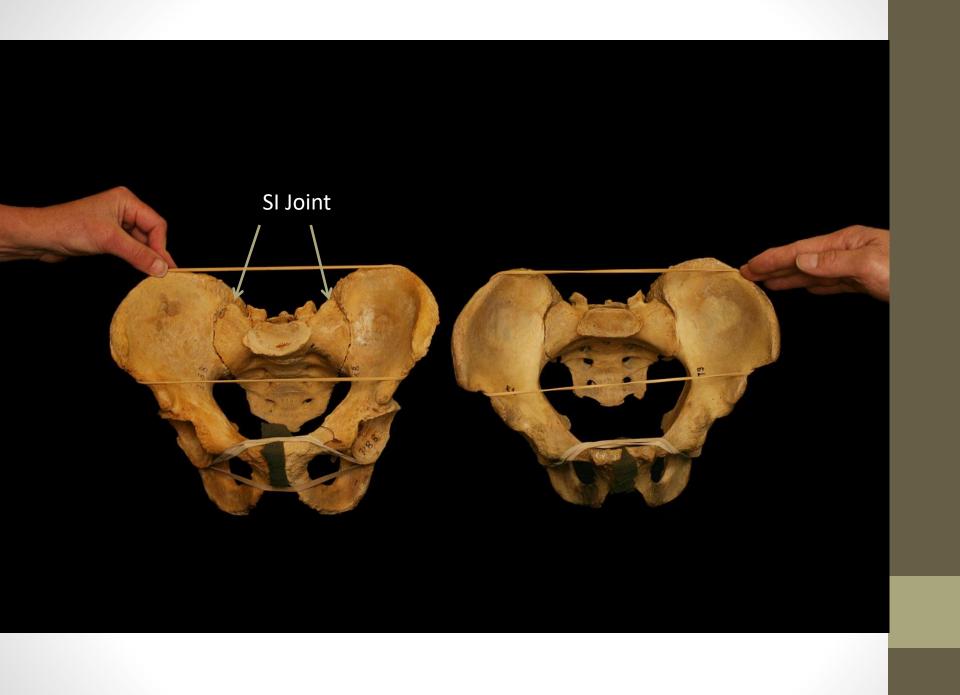
- Rectus abdominus
- External obliques
- Internal obliques
- Transverse abdominus



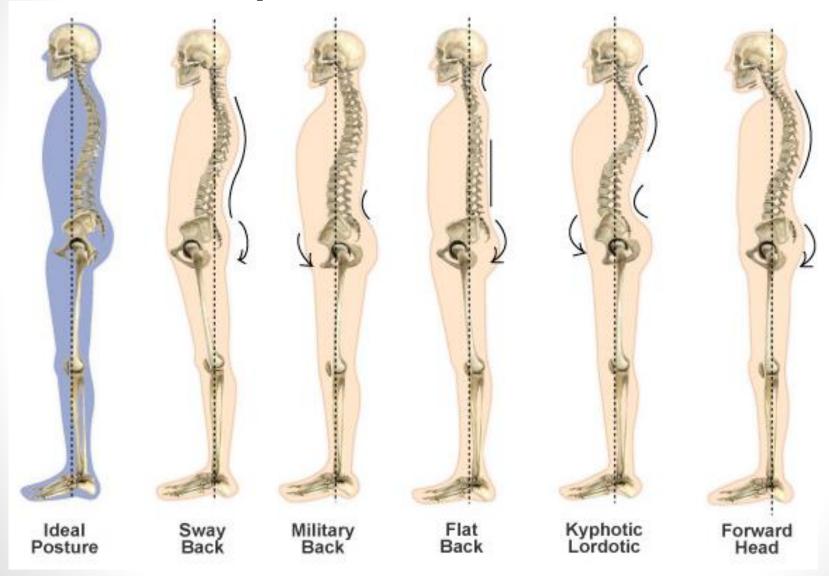
#### Sacroiliac (SI) joint

- Sits between the sacrum and iliac bones to create stability
- Supports the entire weight of the upper body
- Sitting down takes away this stability
- Pain: sharp and stabbing from hips to lower back and down the thighs.
   Takes the 'weight bearing' feeling out of the legs
- What are good Asana for SI joint pain?



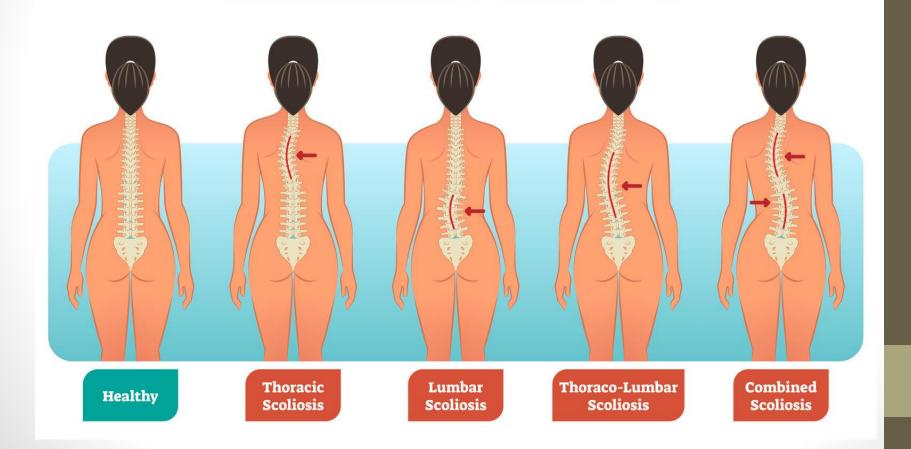


## Postural problems



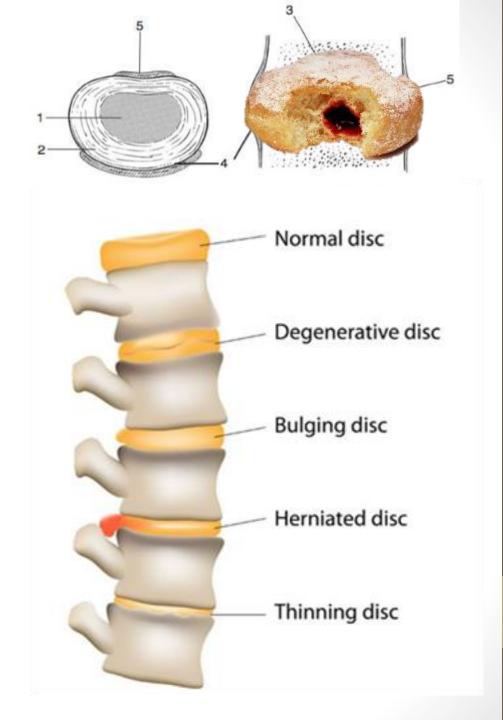
### Scoliosis (p.20)

#### **TYPES OF SCOLIOSIS**



#### Disc injuries

- Most injuries happen in the junctions between the segments of the spine.
- Discs are covered in this fibrous tissue with a gel center
- They move in all directions



#### Homework

Reflect on the yoga (or other) injuries you have personally experienced. What factors contributed to the injuries? How did you deal with the injury in your practice and how did you make modifications? How did your teachers help you modify your practice?

What is your take on physical health and yoga? How do we practice and teach safe yoga?

#### Thank you!

