

# VERTEBRAL MOBILITY, SPINE AND YOGA

## Course Description:

This workshop is aimed at yoga teachers, both in training and after training, as well as yoga students who wish to learn more in-depth about anatomy. Based on the pioneering methodology 'Anatomy of Movement' and its 40 years of research and training experience, this course addresses movements that involve the spine, covering in detail a structure of fundamental importance in yoga asana practice.

Depending on the individual body of each practitioner, flexion and extension movements, inclination as well as rotations of the spine can be facilitated or limited due to one or more vertebrae at different points in the spine. During the course we organize information regarding these movements in a progressive way, creating a reading of the different phenomena that take importance in each specific movement.

## Goals of the course:

- To deepen the knowledge of the structure of the spine, the vertebrae and the intervertebral joints.
- To understand the possibilities of movement of the intervertebral joints at different points of the spine and observe this movement in the context of a yoga class as a student and as a teacher.
- To identify hyper- or hypo-mobile regions and how to protect them in postures through adaptation of movements, preparatory exercises, use of material to help the movement and verbal instructions during class.

## Program:

This workshop will alternate between different elements:

- Anatomical exploration to observe the vertebral structures and the structures that keep them in place, in relationship to the practice of yoga.
- Practical workshops for different movements that address postures and allow the progressive introduction of analysis.
- Instructions for teaching methodology during which different preparations for asanas are explored, and various adaptations of asanas are proposed.

Throughout the course, the following questions will be addressed:

- How can we read a posture, in particular in the way that it pertains to the spine?
- What is the movement that is triggered?
- Where in the spine is it most evident?
- Which factors increase its amplitude? (intra or extra-corporal forces).
- What is the intensity of the load on the spine at different moments while the posture is performed?
- What are the factors that could intensify this load?
- Are there any possible risks for the spine?
- How do we optimize the beneficial effects of posture from the point of view of anatomy?

# ANATOMY FOR PRANAYAMA

## Course Description:

In yoga practice, pranayama can be seen as a set of respiratory practices that occupies a key role and goes hand-in-hand with asana practice. While in some pranayama exercises the flow of respiration is observed, in others it is stopped, suspended, shortened, or lengthened in order to modify the spontaneous process. This course will take the most common pranayama practices as a starting point to analyze the main anatomical structures and physiological functions put into play. It provides a valuable entry point for understanding in more depth how to approach, optimize and adapt the practices for optimal outcome.

## Course aimed at:

- Yoga instructors.
- Facilitators of yoga training programs.
- Yoga practitioners.

## Program:

The workshop will cover the following points:

- Observation of what exactly happens during the most well-known pranayama exercises, including:
  - Natural breathing.
  - Bhastrika.
  - Kapalabhati
  - "Complete" breathing.
  - Alternate nostril breathing.
  - Exhale and inhale retention (Antara & Bahya Kumbhaka)
  - Spontaneous retention (Kevala Kumbhaka)
- Practical movement workshops, detailing different types of breathing movements, allowing for step-by-step analysis.
- Exploration of the anatomy of respiratory structures related to pranayama. :
  - Skeleton and joints that intervene in breathing.
  - Thoracic cage.

Rib movements.  
Certain bones of the skull.  
Respiratory viscera.  
Lung airways.

- Inhaler muscles.
  - The diaphragm. Presentation and operation.
  - Observation during pranayama.
  
  - Other inhaler muscles:  
brief presentation of each muscle, experimentation of the type of movement it triggers.
  - Localization of the muscle during certain practices of pranayama.
- Exhaler Muscles.
  - Abdominal and costal breathing muscles.
- Respiratory physiology:
  - Functioning of the respiratory system:  
relationship with the cardio-vascular system.
  - Neurological control of breathing.
  - Difference between bulbar and cortical breathing.
  - Observation in the set of pranayama processes.
  - Description of respiratory movements.
  - Joint function in the asanas.
  - Description of respiratory volumes.
  - Identification in certain breaths of pranayama.
  - Forces that affect respiratory volumes.
- Analysis of certain situations of inspiration or suspension of breathing.