

# YOGA & MEDITATION FOR HEALTH AND WELL-BEING

CHRISTINE PARADIS '84



WILLIAM & MARY  
WOMEN

## MY STORY...



W&M circa 1983



US Lacrosse circa 1993



Amherst College Lacrosse circa 2003

## WHAT IS YOGA?

yo-ga

'yōgə/ *noun*

Yoga is a hindu spiritual and ascetic discipline, a part of which, including breath control, simple meditation, and the adoption of specific bodily postures, is widely practiced for health and relaxation. (dictionary.com)

In sankrit (ancient language of the world) it means to "yoke" or *union*.



# The body on yoga & meditation...

# It's not just about touching your toes!

## Prefrontal Cortex

This portion of the brain naturally thins with age. It has been proven that meditation can reverse this process, which would otherwise contribute to cognitive decline.

## Posterior Cingulate Cortex (PCC)

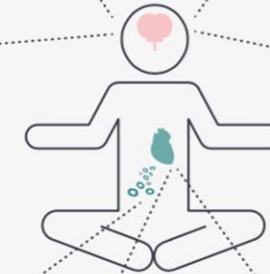
This region of the brain is associated with creativity and self-reflection. Research shows that meditation has beneficial effects on the density and structure of this region.

## Amygdala

This region of the brain is closely correlated to one's experience with negative emotions like stress. Stress can increase the density of this region, altering the structure of the brain. Meditating can help reduce the density and maintain the brain's healthy structure.

## Immune System

Meditation is linked to reduced inflammation and strengthened immunity.



## Heart

Meditation may protect against heart disease by reducing inflammatory markers associated with its development.

## Pain Response

Meditation has been proven to strengthen your pain response. The practice of mindfulness improves the body's physiological response to pain as well as one's perception of pain.

## Temporoparietal Junction (TPJ)

This part of the brain governs perspective and empathy. A meditation modality called Cognitively-based Compassion Training has been shown to improve the ability of subjects to read emotions on strangers' faces.

## Hippocampus

This part of the brain shapes new memories from experiences. Stress hormones have a shrinking effect on the hippocampus, interfering with memory and navigation. Meditation can help maintain the size of this structure, which is pertinent to our mental resilience.

## Blood Pressure

Meditation helps to dilate the blood vessels, improving blood flow and thereby lowering the pressure needed to pump blood throughout the body.

## Proven Benefits of Yoga & Meditation

- Increases Quality of Life, Strength, Flexibility and Balance
- Reduces Stress & Anxiety by Decreasing Grey Matter in Amygdala
- Improves Mental Resilience by Maintaining Size of the Hippocampus
- Decreases Physical Pain & Helps Physiological Response to Pain
- Functions as Complimentary Therapy for Anxiety, Depression, PTSD, and ADHD
- Reduces Inflammatory Markers and Strengthens Immunity

## 5 Ways to add Yoga & Meditation to Your Day...

- Do basic stretches at work or home
- Take a break to breathe!
- Look for a Yoga Class or MBSR (Mindfulness Based Stress Reduction) 8-week course near you
- Download on the APP Store: Headspace, Breathe
- Subscribe to online classes : Yoga Anytime, YogaGlo

## The many benefits of a Yoga practice....

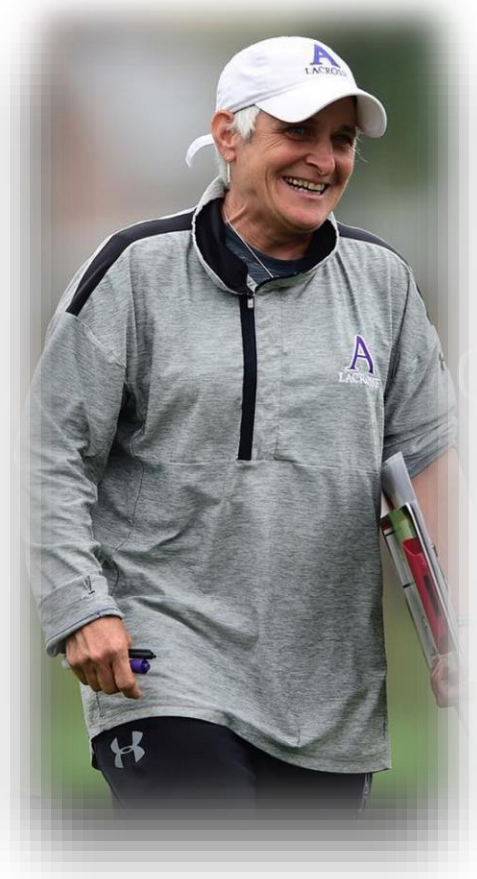
### The 5<sup>th</sup> Wave

By Rich Tennant



"This position is good for reaching inner calm, mental clarity, and things that roll behind the refrigerator."

YOGA  
WORKS...





## Research Sources

- Exploring the Therapeutic Effects of Yoga and its Ability to Increase Quality of Life (Katherine Woodyard, IJOY, 2011)
- Yoga & Meditation Practitioners Exhibit Greater Grey Matter Volume and Higher Cognitive Function (Brett Froeliger, Eric Garland and Joseph McClernon, Hindawi Publishing, 2012)
- Yoga for Lower Back Pain (Holger Cramer, Clinical Pain Journal, 2013)
- Yoga as an Alternative & Complimentary Approach to Stress Management (Manoj Sharma, Journal of Evidence Based Alternative & Complimentary Medicine, 2014)
- Medical Yoga Therapy (Ina Stephens, UVA, MDPI, 2017)
- Improve Mental Resilience & Immune Function, Possible Links to Reduced Inflammatory Markers (B. Rael Kahn, Frontiers in Human Neuroscience, 2017)

**NAMASTE....**

**The light in  
me bows to  
the light in  
you.**

