





Faculty Rank: Assistant Professor

Degrees & Education:
PhD in Nursing;
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## **Research Interests:**

- Respiratory psycho-physiological mechanisms of meditation
- Development of meditation interventions for use in healthcare
- Chronic symptoms
- Self-care management



## Roxane Chan PhD, RN, AHN-BC, LMT

Dr. Chan's overall research goal is to help persons with chronic disease develop better self-care management through improved symptom awareness. Her research focuses on identifying respiratorypsycho-physiological mechanisms measures of meditation as an intervention to increase mindfulness. Everyone has some level of mindfulness which helps them recover from and perhaps thrive during difficult life experiences. The general public has embraced meditation as a skill for developing mindfulness for personal spiritual development. Healthcare practitioners have identified that teaching meditation as a skill to develop mindfulness may improve the mental, emotional and physical health of persons with acute or chronic health conditions. Effective use of meditation in the healthcare setting will require an understanding of the physiological mechanisms and measures of meditation. This understanding will help guide the development of appropriate meditation interventions for persons with chronic disease and healthy people, resulting in health risk reduction and health promotion.

Preliminary research by Dr. Chan examined a program of meditation in persons with Chronic Obstructive Pulmonary Disease (COPD). This research project examined the feasibility and acceptability of an eight week mindfulness based meditation intervention that was customized for the COPD population. It also attempted to identify a bio-physiologic measure of meditation uptake by measuring changes in respiratory patterns as measured with inductive plethysmography. This research was able to identify that persons with COPD have stable breathing patterns that may reflect changes in mindfulness similar to those found in persons without lung disease. This study concluded that a program of mindfulness meditation is feasible and acceptable to persons with COPD. This preliminary research identified changes needed to ensure success for future mindfulness interventions in this population.

Dr. Chan's current research goals include further identification of the mechanism and measures of meditation uptake in healthy people. This information will help guide measurements in persons with chronic disease. Her long term research goals include: developing an understanding of complex healthcare interventions such as meditation, the turning personal points they create, and how those turning points translate into improved health for persons with chronic disease.