# NEURAL DYNAMICS OF SPONTANEOUS THOUGHT GENERATION: AN MRI STUDY

### ABOUT THIS STUDY

This study uses functional magnetic resonance imaging (fMRI) to examine changes in brain activity associated with the arising of spontaneous thoughts in experienced Vipassana, Zen, insight, and mindful awareness meditators. During fMRI scanning, participants attend to their breath and press a button to indicate whenever a thought arises into their conscious experience. This study will help to inform our understanding of how the brain generates thoughts and transitions them into conscious experience.

MRI is a popular brain imaging tool which uses magnetic fields to measure brain structure and activity. There are minimal safety concerns associated with MRI scanning, and you will be evaluated for MRI contraindications (e.g., metallic implants) prior to participating. To read more about MRI scanning, follow this link: <u>https://www.radiologyinfo.org/en/info/safety-mr</u>

#### PARTICIPATION

To participate, you must have:

- 500+ hours of lifetime meditation experience in Vipassana, Zen, insight, or mindful awareness
- Normal or corrected-to-normal vision
- Proficiency in reading English
- No MRI contraindications (screening provided)
- No ongoing psychiatric medication use other than for depression/anxiety (screening provided)

If you participate, you will:

- undergo a 1.5-hour MRI scanning session at the UBC MRI Centre that includes structural and functional (brain activity) scanning—see below for examples
- undergo a 1.5-hour practice session at the UBC Psychology department up to two days before MRI scanning
- receive \$70 for your participation
- receive images of your brain

## COLLECTED MRI SCAN TYPES



T1 scans measure brain structure and is the type of brain image you will receive by participating



fMRI scans measure brain activity, reflected here by colored patches

## CONTACT

If you would like to participate or have any questions, please contact research lead Andre Zamani (azamani@psych.ubc.ca) or principal investigator Kalina Christoff (kchristoff@psych.ubc.ca).

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