STUDY TITLE: Restorative Yoga and Music Therapy for Third Year Medical Students (MIII): a new way to improve medical student wellbeing.

Investigators: Tetyana L Vasylyeva, MD, PhD; Janet Meller, MD; Mubariz Naqvi, MD,

Study Information Sheet and Breathing Techniques

The goal of this project is to design, evaluate and optimize programs to address and alleviate anxiety and depression among medical students. We will compare Restorative Yoga with Music Therapy and their impacts on students' anxiety and depression. Restorative Yoga will consist of breathing techniques and restorative (minimal movement) poses. Music Therapy will consist of relaxing, pre-recorded music with visual imagery (option to close eyes or watch accompanying video) in addition to breathing techniques.

Participating in this study is voluntary and anonymous. You can choose if you would like to participate in Restorative Yoga or Music Therapy. Sessions will be offered weekly for 6 weeks and will last about 45 minutes. Every student should be able to participate regardless of their physical fitness level. There is no guaranteed benefit from your participation. You can also choose not to participate in either program. If you choose not to participate, no one will care nor will there be any punitive measures. It is your choice. Your participation may be known by peers, but your individual participation and any information about you will not be collected, shared, or published for this study. If you decide to participate, we will ask that you fill out an anonymous mental wellbeing survey once at the beginning of participation and once at the end. At the end of participation, you will also be asked to complete a short questionnaire specifying which program you chose, how many sessions you attended, and your satisfaction with the program. There will also be a space for comments or feedback. For further information, please contact Noel Howard - ph: (806)414-9591; email: noel.howard@ttuhsc.edu.

Below, you will find breathing techniques that will be utilized in Restorative Yoga and Music Therapy. This information is provided for your personal use should you choose to use it.

Breathing Techniques

By controlling your breath, you calm your mind and bring awareness to the present moment. In a systemic review on slow breathing, researchers concluded participants experienced "increased comfort, relaxation, pleasantness, vigor and alertness, and reduced symptoms of arousal, anxiety, depression, anger, and confusion." (Zaccaro A., Piarulli A., Laurino M., Garbella E., Menicucci D., Neri B., et al. (2018). How breath-control can change your life: a systematic review on psycho-physiological correlates of slow breathing. Front. Hum. Neurosci. 12:353. 10.3389/fnhum.2018.00353).

In general, it's recommended that you find a comfortable seat (i.e. sit with your back supported and feet on the floor). These can be done in a car, breakroom, at home, and on-the-go.

CAUTION: Many of following breathing techniques include "pausing" the breath (holding the breath between inhales and exhales) Please, do not hold your breath if you are pregnant, have hypertension, heart problems, or anxiety. If you find these techniques are not helpful or cause you distress for any reason, please discontinue use.

Page 1 of 2 Version Date: 27 April 2020 **STUDY TITLE**: Restorative Yoga and Music Therapy for Third Year Medical Students (MIII): a new way to improve medical student wellbeing.

Investigators: Tetyana L Vasylyeva, MD, PhD; Janet Meller, MD; Mubariz Naqvi, MD,

<u>Ujjayi Pranayama:</u>

When practicing Ujjayi, you completely fill your lungs, while slightly contracting your throat, and breathe through your nose. The contraction in the throat is the same muscle used when you fog a mirror with your breath. To the best of your ability, contract this muscle while inhaling and exhaling in out of the nose.

Sama Vritti Pranayama

- 1. Close your eyes. Breathe in through your nose, slowly counting to 4. Feel the air filling your lungs.
- 2. Hold your breath here and slowly count to 4 again. Try not to clamp your airways shut. Simply avoid inhaling or exhaling for 4 counts.
- 3. Slowly exhale to the count of 4.
- 4. Hold the exhale for another 4 counts.
- 5. Repeat steps 1–4 for 4 minutes or until you feel calm and centered.

Humming bee breath (bhramari)

- 1. Choose a comfortable seated position.
- 2. Close your eyes and relax your face.
- 3. Place your first fingers on the tragus cartilage that partially covers your ear canal.
- 4. Inhale, and as you exhale gently press your fingers into the cartilage.
- 5. Keeping your mouth closed, make a loud humming sound.
- 6. Continue for as long as is comfortable.

Nadi Shodhana

Gently close your right nostril with your thumb. Inhale through your left nostril, then close it with your ring-little fingers. Open and exhale slowly through the right nostril.

Keep the right nostril open, inhale, then close it, and open and exhale slowly through the left. This is one cycle. Repeat 3 to 5 times, then release the hand mudra and go back to normal breathing.

Deep breathing technique:

How to practice deep breathing

- Sit comfortably with your back straight. Put one hand on your chest and the other on your stomach.
- Breathe in through your nose. The hand on your stomach should rise. The hand on your chest should move very little.
- Exhale through your mouth, pushing out as much air as you can while contracting your abdominal muscles. The hand on your stomach should move in as you exhale, but your other hand should move very little.
- Continue to breathe in through your nose and out through your mouth. Try to inhale enough so that your lower abdomen rises and falls. Count slowly as you exhale.

If you find it difficult breathing from your abdomen while sitting up, try lying down. Put a small book on your stomach, and breathe so that the book rises as you inhale and falls as you exhale.

Page 2 of 2 Version Date: 27 April 2020