Building Brain health
facilitator guidebook

*“Every man can, if he so desires, becomes the sculptor of his own brain.”* -Santiago Ramon y Cajal

Dear Building Brain Health program facilitator,

Welcome to this 8-Unit program offered by Masterpiece. Building Brain Health (BBH) is led by Dr. Rob Winningham, Provost and Vice President for Academic Affairs at Western Oregon University. This program covers topics such as maximizing memory, enhancing executive functioning in the brain, the role of nutrition and physical exercise on cognition, and how to stay motivated to enhance and maintain brain health. As a facilitator, you will play an integral part in leading the discussion and planning additional (optional) activities.

To begin, we ask that you take a few minutes to review this Facilitator Guide. In it, you will find helpful instructions to prepare for each unit, such as what materials and equipment you will need, as well as suggestions for creatively enhancing this program based on individual needs and interests.

In many ways, facilitating the BBH program is simpler than other Programs by Masterpiece in that the sessions are all pre-filmed, and facilitators can “plug and play” each session and pause the film for breaks, discussion questions and activities. To further enhance the program, we encourage you to use our suggested activities for inspiration. Please note that some of these activities will require pre-planning.

# Preparing for the Building Brain Health Program

**What You Will Need:**

* A strong internet connection (if streaming)
* A projector and large screen or TV screen
* Audio hookup for computer (to viewing source)

**Before each session:**

* Review the appropriate section(s) of the Facilitator Guidebook.
* Set up audio/visual equipment and chairs in a way that allows for discussion.
* Vimeo video and YouTube link for each unit are provided in each unit’s folder and the YouTube links are also in this facilitator guide.
* Videos range in length from 10 – 23 minutes.
* Each unit resource provides an objective, overview, and activities.
* Provide the unit worksheet(s)and pens/pencils for everyone.

Unit 1: Maximizing Memory Ability <https://youtu.be/pOYJK0UjJ2s>

Introduction to what memory is, how it works, and how we can improve it.

**Objectives/Overview:**

* Challenge your short-term memory while learning how memories are retrieved.
	+ Primacy and Recency Effects
* Explore the three stages of making memories:
	+ Encoding, Storing, Retrieving
* Learn the three memory processes:
	+ Sensory Memory, Working/Short-Term Memory, Long-Term Memory

**Optional activities**

* Encourage participants to complete the *Pre-Program Survey* to reflect where they are now and let them know there will be a *Post-Program Survey* at the end of the program.
* *The Trigger Word Activity* involves giving the group a word (e.g., cortex, memory, brain, friend). When the instructor (or anyone else) says the trigger word, everyone must do a pre-designated behavior, such as putting their right hand on their head or putting their right index finger on their nose. Use different trigger words and behaviors for different sessions. The activity is fun and requires that the participants remember the word and pay attention to whether it is said.

**Questions for Discussion:**

* What question(s) do you have about memory?
* What do you hope to learn in Building Brain Health?
	+ Facilitator: Write these ideas on a white board or flip chart and come back to them throughout the units to make sure all questions are answered.
* Much of our memory is under our control, what would you like to work on to improve your ability to make new memories?

Unit 2: Prescription for Better Memory <https://youtu.be/h9_ASX9oCYA>

Fifty percent of our memory ability is dependent on our lifestyle choices – an exploration of which lifestyle choices are involved is a prescription for better memory.

**Objectives/Overview:**

* Explore the prescription for better memory:
	+ Cognitive stimulation
	+ Meditation and mindfulness training
	+ Stress reduction
	+ Quality sleep
	+ Social support and engagement
	+ Proper nutrition
	+ Physical exercise – aerobic and strength training

**Optional Activities: (Choose one or more or use them as inspiration to create your own.)**

* During this video Dr. Rob discussed the importance of mindfulness, yoga and tai chi on our memory. Invite an instructor to teach yoga or tai chi to the class or play this guided meditation: [Beach Visualization: Exploring the Senses with Gratitude](https://www.spreaker.com/user/masterpiece_living/beach-visualization-01).
* *Creative Brain Storming*: Think of as many uses for a certain object as you can. For example, newspapers, old car tires, a dime, old milk carton, refrigerator, etc. Participants will generate as many uses as possible for a common everyday object. The goal is to try to think as creatively as possible. This activity is challenging for people with Mild Cognitive Impairment and almost impossible for people with dementia (therefore it is probably an excellent activity to prevent future memory problems). Give participants examples of creative ideas to show them that they don’t need to generate common uses. For example, if the topic is “Use for old newspapers…”, then give creative examples such as: use it for insulation, use it to soak up an oil leak under a car, line a cat litter box, use it to cut letters out and make a ransom note, etc. After participants have worked on the activity for 3-5 minutes, ask them to try and determine which of their responses were the most unique (i.e., no one else generated the answer(s)).
* Bring in a healthy snack to aid the discussion in the importance of well-rounded nutrition on the brain.
* *Homework for next week (units 3&4)*: Ask participants to bring in healthy recipes for next week to make a class recipe book.

**Questions for Discussion:**

* What are you doing now that supports your own brain health?
* What do you want to do more of to maximize your cognitive and memory abilities?
* In the video, Dr. Rob discussed the importance of inhibition, or not doing something. What is a time or circumstance when you need to inhibit saying or thinking something?
	+ *Facilitator: “There are many times when inhibition is required. Here are some examples”:*
		- When you don’t want to have a second glass of wine.
		- When you want to stop thinking about something out of your control that provokes anxiety or sadness.
		- When you don’t want to tell someone what you really think because it could hurt them.

Unit 3: Train Your Brain <https://youtu.be/F-w7SwVOuvM>

An introduction to the concepts of cognitive stimulation, cognitive reserve and neuroplasticity.

**Objectives/Overview:**

* Explore the myths of an aging brain and what is possible through neurogenesis.
* Find out whether multitasking and technology are good or bad for the brain.
* Learn about the benefits of mindfulness and other strategies to train your brain.

**Optional Activities: (Choose one or more or use as inspiration to create your own.)**

* Use *Dr. Rob’s Brain Health App Handout* to demonstrate user-friendly apps designed for cognitive stimulation.
* *Homework*: Instruct participants to write down everything that distracts them over the program of a few days. Bringing awareness to these things allows us to take steps toward changing these behaviors.

**Questions for Discussion:**

* Can you think of a time or place where you are or have been distractible? It could be when doing something that is less interesting, stressful, or maybe when you are fatigued.
	+ What can you do in the future to increase your focus during these situations?
* We discussed a lot of possible cognitively stimulating activities. What can you commit to doing more of, that might be different than what you are already doing?

Unit 4: Eating for a Healthier Brain & Body <https://youtu.be/vnUxt7yAYeY>

An exploration of how nutrition can impact our mind and body.

**Objectives:**

* Explore what foods to eat to maximize your brain health (foods high in antioxidants and Omega-3s) and what foods to avoid.
* Learn the benefits and risks of supplements.

**Optional Activities: (Choose one or more or use them as inspiration to create your own.)**

* Plan this unit to occur during lunch and prepare foods high in antioxidants (Brussel sprouts, spinach, blueberries, prunes, raspberries, kiwis, avocados, etc.).
* Use the *One-Letter Puzzle* as an icebreaker (worksheet attached in unit 4 resources).
* Bring in recipes or snack ideas that include foods high in antioxidants or Omega 3s.
* Collect recipes that participants brought in to make a class recipe book to give to participants the final week.
* Have a smoothie or juicing demonstration during class.
	+ Try this recipe: *Green Smoothie* from [Blue Zones](https://www.bluezones.com/recipes/):

INGREDIENTS

* + - * 2 cups spinach
			* 3 cups unsweetened almond milk
			* 1 cup frozen mango chunks
			* 1 cup pineapple, cubed
			* 1/2 avocado

DIRECTIONS

* + - * Combine all ingredients in a blender. Blend until smooth.
			* Yield: Serves 3
			* Per serving: calories 164, fat 6g, sodium 145mg, fiber 5g, protein 2g

**Questions for Discussion:**

* What can you eat to get more omega-3 from fish?
	+ *Facilitator, here are some suggestions: Fish oil tablets, sardines, smoked salmon, shrimp, fish tacos or fish burgers.*
* What are your thoughts on the use of supplements? What has worked well for you?

Unit 5: Healthy Body, Healthy Brain <https://youtu.be/WBMhNRSfdV4>

An overview of how, why, and what physical exercise impacts cognitive functioning.

**Objectives:**

* Learn the specific types of exercise that are linked to increasing cognitive functioningand how much exercise is needed.
* Explore *why* physical exercise influences cognition.
* Get motivated to move more by hearing the list of 19 benefits of physical activity.

**Optional Activities: (Choose one or more or use as inspiration to create your own.)**

* Start the class in the fitness center or invite the fitness instructor to hold a brief demonstration on resistance training.
* Plan to meet before the class starts to take a walk or plan a walk after the class.
* Write down fitness goals, a fitness plan and ask participants to pair up with one another to be each other’s accountability partners.

**Questions for Discussion:**

* We discussed 19 benefits of doing physical exercise. Which three are most meaningful to you (that were mentioned, or not)?
* What are some ways you, your loved ones, and family can increase your overall activity levels?
	+ *Facilitator – here are some ideas:*
		- Walk with others.
		- Spend time playing with children.
		- Take the stairs instead of the elevator.
		- Make it a habit to exercise.
		- Tell someone about your exercise goals and ask them to try to hold you accountable.
		- Write down the benefits of engaging in physical activity and keep in a place you see every day.
* What fitness classes are you currently in? What classes do you want to get involved in?
	+ *Facilitator: Bring this month and next month’s fitness calendars.*

Unit 6: Stress and the Brain <https://youtu.be/r-whQWf-A88>

Why and how stress impacts cognition, and interventions to decrease stress in one’s life.

**Objectives:**

* Explore the difference between good and bad stress and how too much stress impacts short term memory and cognitive functioning over time.
* Learn about cortisol and the effects on our body and brain.
* Brainstorm effective interventions for reducing stress.

**Optional Activities: (Choose one or more or use as inspiration to create your own.)**

* Dr. Rob discusses the impacts of too much stress on our short-term memory and cognitive functioning over time. Use this *Mindful Relaxation Activity* by playing the audio link: [Mindful Relaxation Activity](https://www.spreaker.com/user/masterpiece_living/mindful-tense-release-activity) or read the ten steps below:
1. Lie on your back with your arms at your side (palms up), and your legs straight in front of you, about hip’s distance apart, allowing your feet to relax wherever they fall.
2. Begin with a few deep breaths.
3. Scrunch up your facial muscles as if you have eaten something sour. Inhale, pause, exhale, and relax your muscles, as if they were melting.
4. Next, imagine you are lifting your head off the floor by making the motion of lifting (but keep your head touching the floor), so that your neck muscles are engaged. Inhale, pause, exhale. Relax your head and neck. Rock your head gently from side-to-side.
5. Draw awareness into your left arm. Make a fist with your left hand and tighten the arm up through the shoulder. Lift as if to bring the arm just a millimeter from the floor. Inhale, pause, exhale and allow your arm to drop to the floor and release your fist. Stretch your left hand open as wide as possible and then relax it. Allow the arm to feel heavy and weighted into the floor.
6. Repeat #5 with your right hand and arm.
7. Draw awareness to your left leg. Scrunch up the toes and tighten the entire leg up through your left glute. Lift as if picking the leg up just a millimeter off the floor. Inhale, pause, exhale, and drop the leg to the floor. Intentionally stretch the toes of your left foot and then relax them. Rock the leg slightly from side to side and then let it completely relax into the floor.
8. Repeat #7 with your right foot and leg.
9. Draw your awareness into your belly. Inhale as if filling up a balloon. Pause at the top of the breath. Open your mouth and exhale the air out as if someone popped that balloon. Repeat two more times. Allow your breathing to return to normal, in and out through your nose.
10. If needed, rock your hips slightly to relax your hips and low back. Scan your body for any left-over tension. With each exhale, relax more deeply into the floor, feeling the weight of your arms and legs completely supported by the Earth beneath you. Relax here for a few minutes before opening your eyes.
* Start or end the class with yoga.

**Questions for Discussion:**

* Stressors vary from person to person. If you are comfortable sharing, please share what causes you to experience stress?
* What do you do or what do you want to do more of to reduce your stress level?
* What are some stressors that you *can* reduce? *How* will you reduce those stressors?

Unit 7: Dementia – What is it? <https://youtu.be/dl2A6fgoZgQ>

An overview of the types of dementia and the signs and behaviors associated with memory challenges.

**Objectives:**

* Explore the different types and signs of dementia.
* Review ways of improving executive functioning and attention.
* Discuss tips for caring for someone with memory challenges.

**Optional Activities: (Choose one or more or use as inspiration to create your own.)**

* Bring copies of Dr. Rob’s Cognitive Connections that specifically relate to testing Executive Functioning.
* Share information on Dementia Friendly America® <http://www.dfamerica.org/>. How can your organization get involved?
* Review free resources from Positive Approach to Care: <https://teepasnow.com/>. It *offers education, support, and training to improve the world of dementia care, one mind at a time, through a relationship first approach created by Teepa Snow.*

**Questions for Discussion:**

* Dr. Rob mentioned tips for caring for loved ones with dementia – what additional tips do you have?
* How can we further support and engage fellow residents living with memory impairment? How can we support caregivers/family members?

Unit 8: Inspiring Yourself to Healthier Behaviors <https://youtu.be/-BWVoWXRHqs>

How to get and stay motivated and maximize opportunities to enhance our brain health.

**Objectives:**

* Explore the concept of self-efficacy and how it impacts our behaviors.
* Practice setting small, achievable goals.
* Learn ways to get and stay motivated.

**Optional Activities: (Choose one or more or use as inspiration to create your own.)**

* Handout the recipe book that was made from the healthy recipes collected during Unit 4.
* Practice verbalizing goals and writing them down as useful ways for staying motivated and sticking to goals. Have participants write down their brain health goals and go around in a circle saying them aloud afterward.
* After the discussion questions, invite participants to complete the *Post-Program Survey* and then compare their answers to their *Pre-Program Survey.* Encourage them to share about their experience during the program.

**Questions for Discussion:**

* Think of a time you did something that was very difficult. What motivated you?
* What are some things you want to accomplish in the next few months?
	+ For each thing you want to accomplish, think of three benefits of doing that behavior.
	+ Now, tell a friend about your goal and why you want to achieve it.