



# Mind over Matter: Cognitively-Stimulating Activities for Everyone

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April 22, 2020

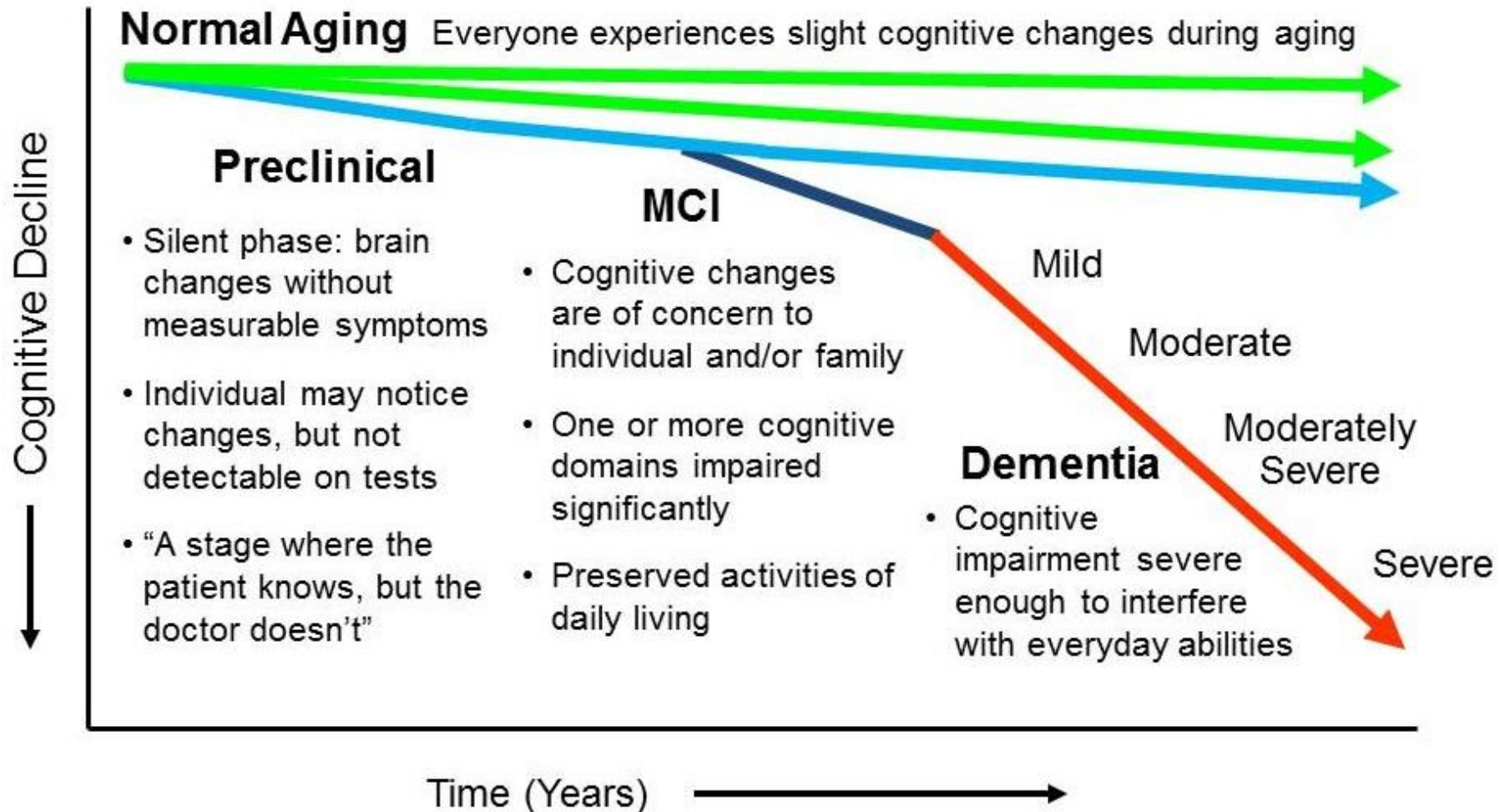
## Today's Road Map

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- “Normal” Cognitive Changes in Aging
- Research on Cognitive Training
- Practical Advice
- Ideas for Cognitive Engagement

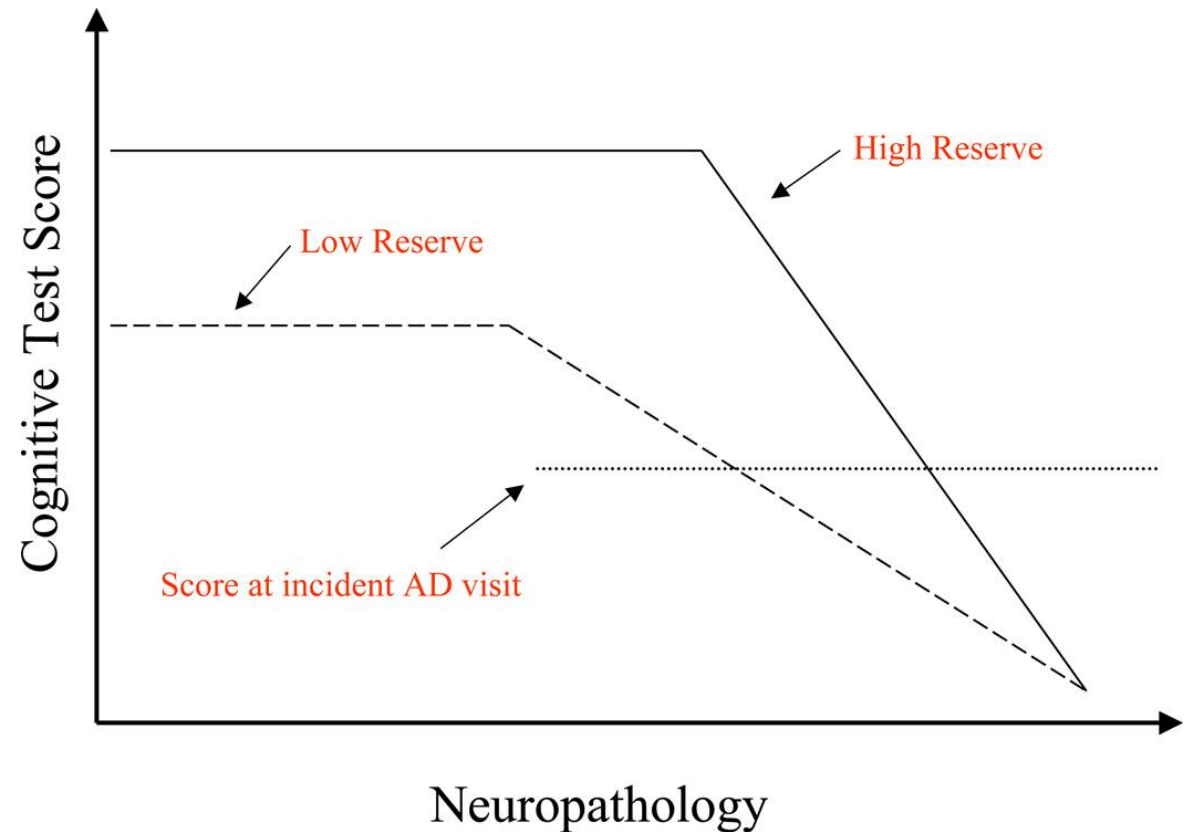


# Cognitive Aging - What's Normal, What's Not



# Cognitive Reserve Hypothesis

- People with Higher Reserve:
  - Tend to perform better on memory tests in the absence of AD pathology
  - Performance declines later because they can tolerate more pathology before it affects daily functioning



# Neuroplasticity & Cognitive Training



Neuroplasticity is the brain's ability to form and reorganize connections

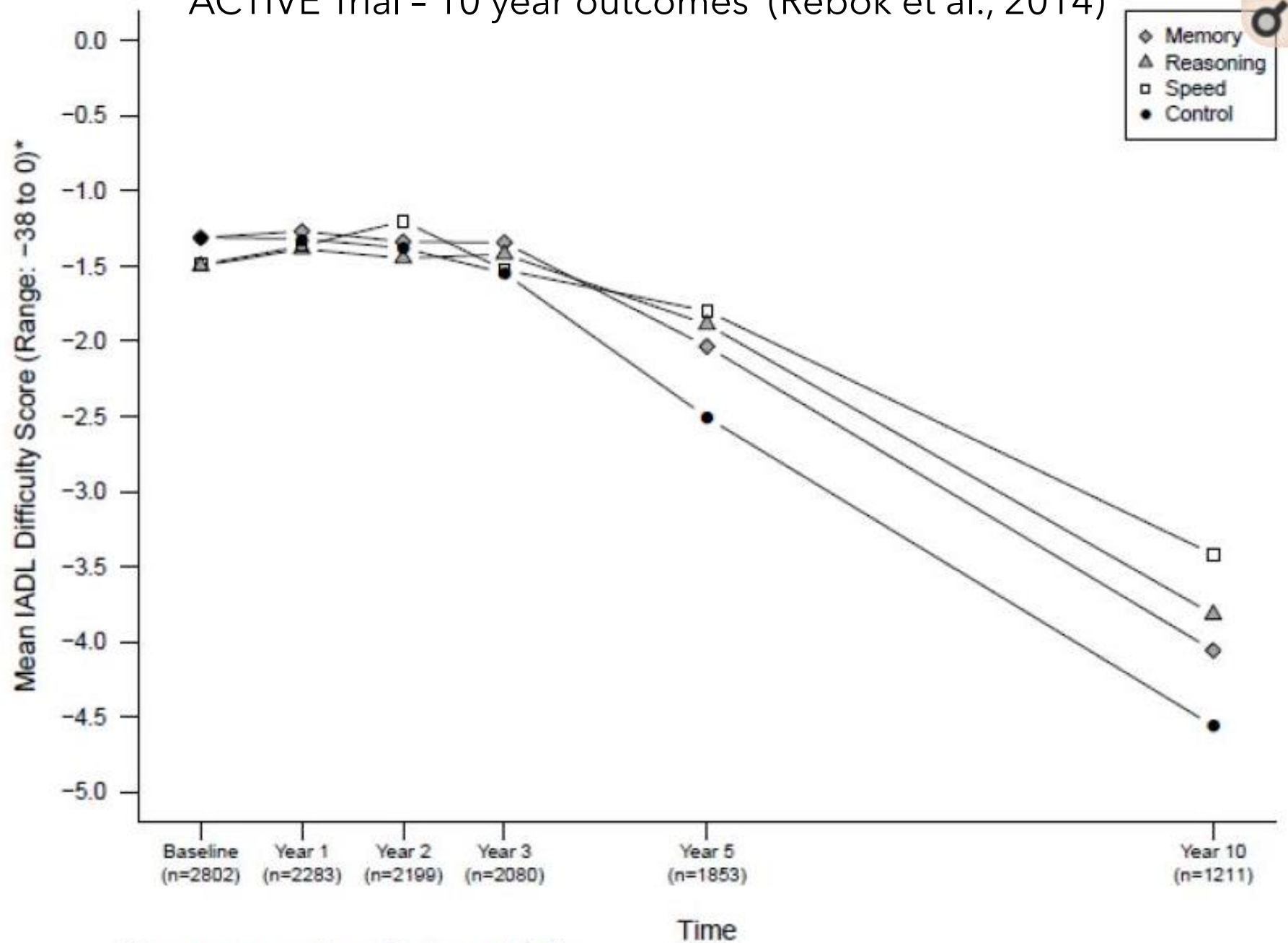


Addition of new neurons later in life *may* enhance new memories as those new neurons are more 'plastic' and can modify their connections and store memories



Cognitive Training = program designed to teach strategies and provide guided practice to improve a specific cognitive domain

# ACTIVE Trial - 10 year outcomes (Rebok et al., 2014)



\* Scores were reversed to graphically present decline.



# Research on Cognitive Training

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**Training one cognitive domain does not necessarily improve other domains**

Ex: Memory training does not help processing speed



**You can improve an ability by practicing... to a point**

Greater similarity of training to daily life skill = most success

Less impact with higher cognitive impairment

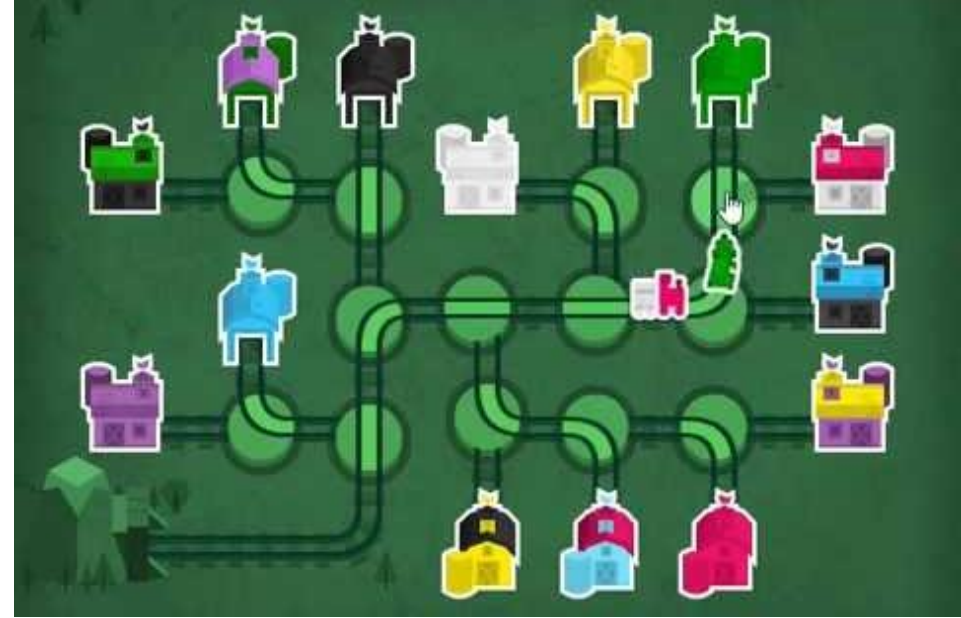


**More is not necessarily better**

Variety, novelty, level of engagement are important

# "Brain Training" Programs

- Most commercial products do not meet research definition for 'cognitive training'
  - Low generalizability. Ex: Daily Sudoku will make you better at Sudoku
- Inconsistent evidence of cognitive improvement
- Limited generalizability to everyday tasks

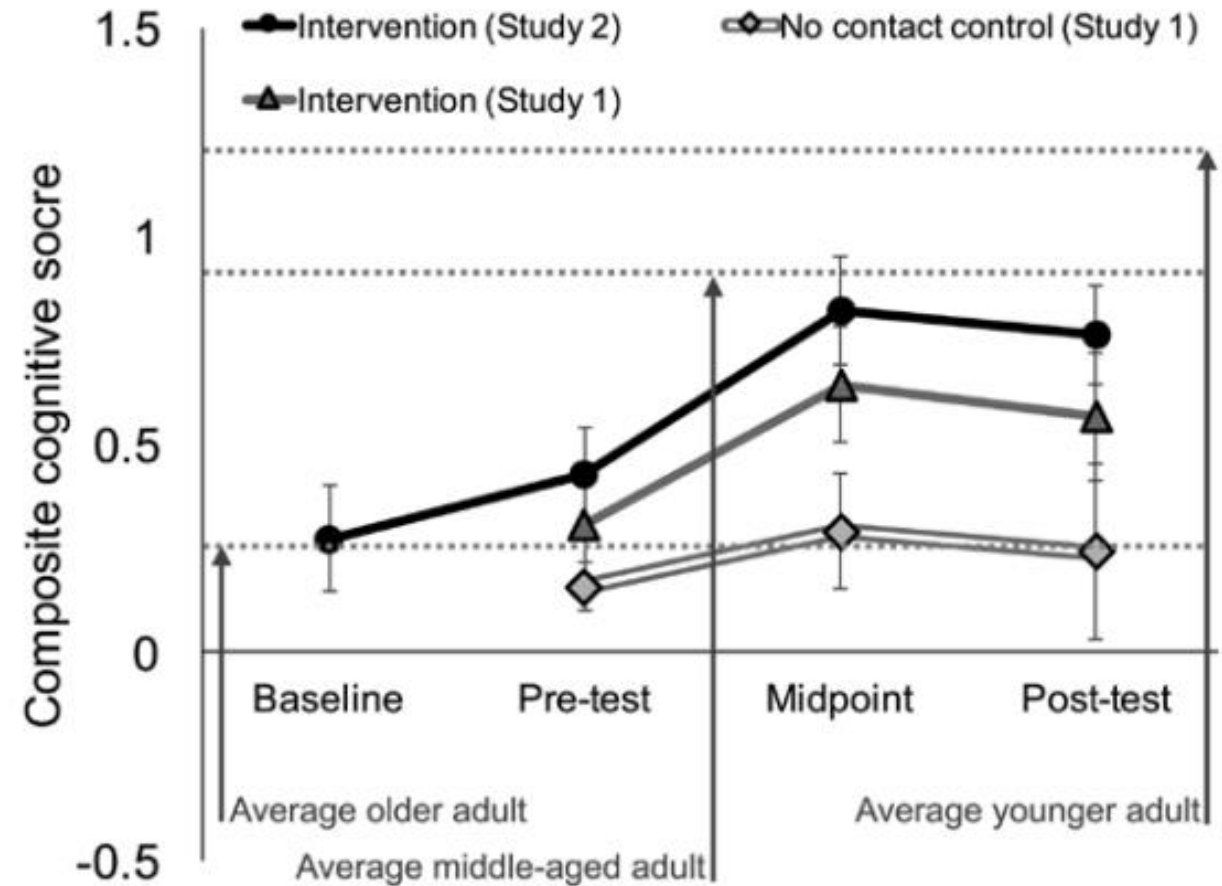




# Never Too Old to Learn

## Johns Hopkins University Study (2019)

- Older adults asked to take 3 classes
  - Spanish, drawing, music composition
  - 3 months long
- Learning multiple skills simultaneously increased cognitive abilities in older adults after 6 weeks to levels similar to middle-aged adults, 30 years younger



Leanos et al., 2019

# Mythbusters – Cognitive Aging Edition

- Myth 1: You are born with all the neurons your brain will ever have
  - We are only beginning to understand how our brains change over time
- Myth 2: Dementia is inevitable. It's a normal part of aging.
  - There are normal age-related changes to cognition, but these are different than what is seen in dementia
- Myth 3: You can't teach an old dog new tricks
  - You sure can!

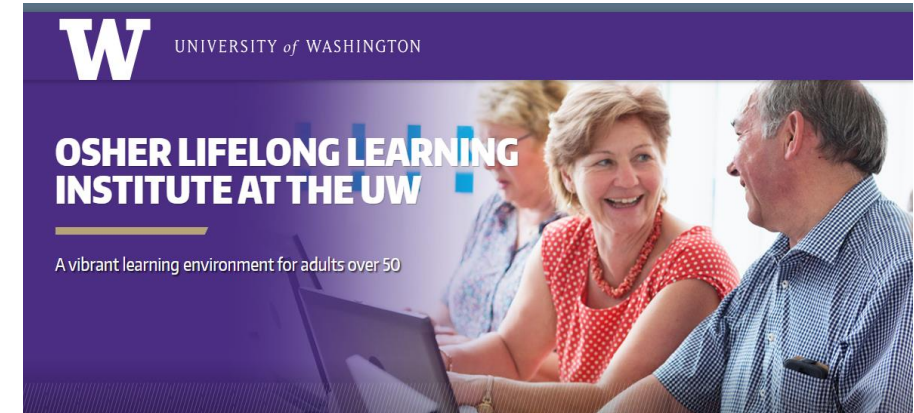


# Practical Advice

- Seek out new activities
- Re-engage in something you used to enjoy
- Open your mind and be flexible
- There is no 'right' or 'wrong' activity to do
- You are more likely to stick with something that you enjoy!
- Positive feedback from others keeps you motivated and accountable
- Quality over quantity

# Lifelong Learning

- Classes in the community
  - UW [Osher Lifelong Learning Institute](#)
  - Seattle Community Colleges: [Central](#), [North](#), [South](#)
  - Seattle Parks and Recreation: [Lifelong Recreation](#) programs





# Lifelong Learning - Online

- Free courses in many subjects
- Taught by university professors
- [Coursera](#)
- [edX](#)
- [Harvard University](#)





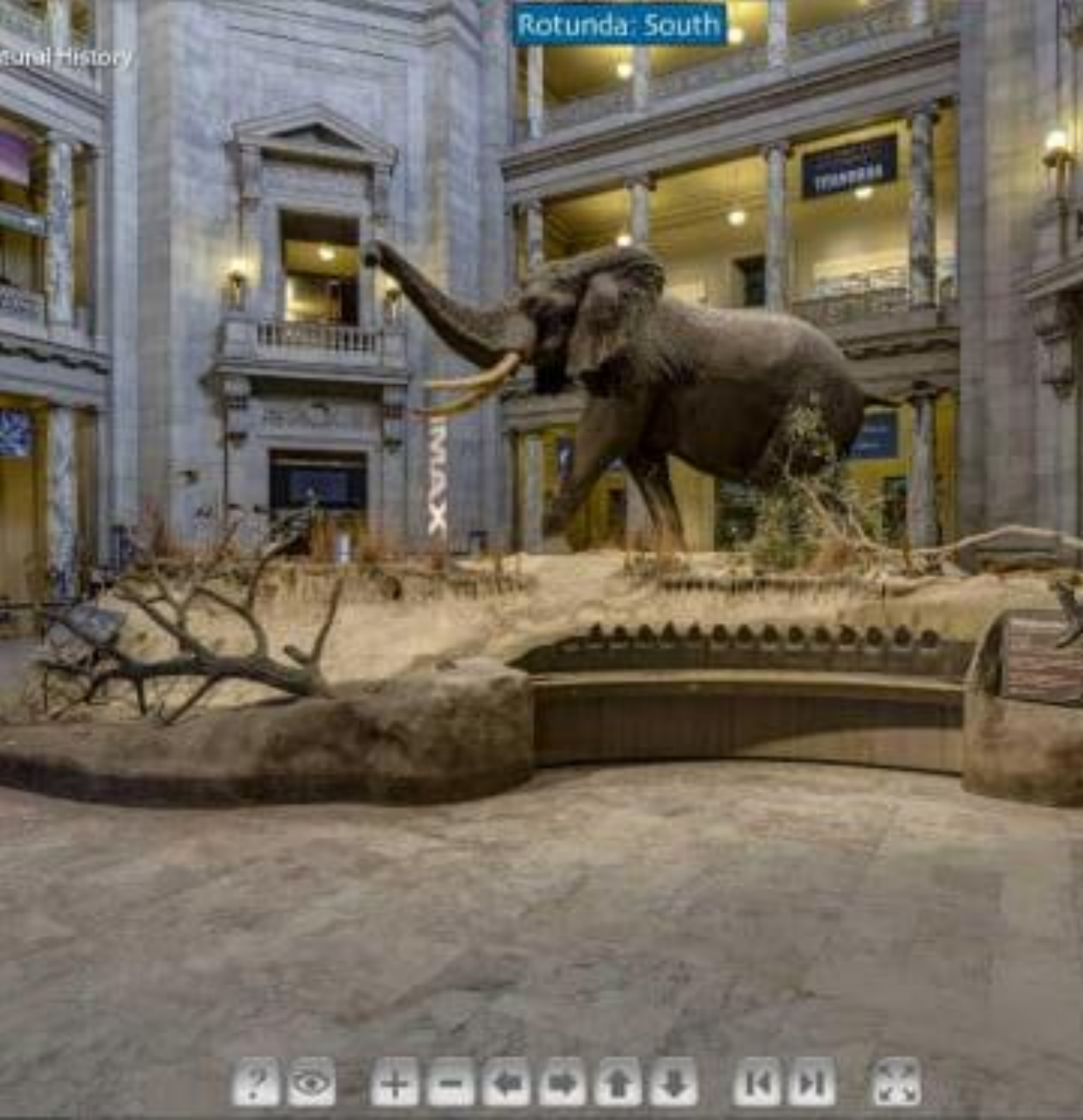
# Embrace Your Hobbies and Strengths

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- Challenge your brain with something different
- Modify a long-standing hobby
  - Like to read non-fiction? Try a Sci-Fi short story or poetry
  - Enjoy watercolor? Try pencil sketching
  - Avid knitter? Consider cross-stitch or learn to make your own patterns
- Change up your puzzle habit
  - If you like crosswords, try Sudoku







# Museum Virtual Tours

- NASA at Home - [Virtual Tours](#)
- American Museum of Natural History - [Online Exhibits](#)
- [Google Arts and Culture](#): online tours of art museums around the world
  - Musee d'Orsay (Paris), Van Gogh Museum (Amsterdam)



# Online Library Resources

- E- Books, audio books, digital magazines
- Movies, TV series, music
- [Genealogy](#) research
- Podcasts by librarians: [SPL](#) and [KCLS](#)
- Online book clubs
- ["Your Next Five"](#) curated book lists by librarians
- SilverKite online art classes for people 50+ via SPL or KCLS



# Make it Social

- Improve accountability!
- Join a class with a friend
- Write letters or poems
- Teach a skill to a loved one – or learn one from them
- Play a new game with family or friends
- Conversation Starters: [StoryCorps](#)
- Consider volunteering opportunities ([Volunteermatch.org](#))



# Music and Concerts at Home

- Music can help foster reminiscence, conversation, and cognitive engagement
- Many online and streaming options during COVID-19



- [Seattle Symphony](#)
- [Seattle Opera](#)
- [Metropolitan Opera](#)
- [Berlin Philharmonic](#)
- Billboard's List of [Online Music Events](#)
- NPR's List of [Online Concerts](#)
- Classical Music [Streaming Links](#)

# Some Final Tips

- Start easy and work up
- Choose something that will fit into your schedule and is easily accessible
- Invite a friend or loved one along
- Try a cognitive *and* physical activity (pickleball, anyone?)



- Set achievable goals
- Be open minded
- Be kind to yourself

# Virtual Community Wellness Talks

4/3 - Dementia Caregiving in the Midst of Covid-19: Health, Safety and Communication

4/8 - Staying Connected During Social and Physical Distancing

4/10 - Staying Active while Staying Home

4/15 - Mindfulness Meditation for Stress Management

4/17 - Info-Savvy: Staying Sane in the Era of Information Overload

4/22 - Mind over Matter: Cognitively-stimulating activities for everyone

4/25 - A Reason to Get Out of Bed in the Morning: Finding Purpose During COVID-19

4/29 - Enjoying the Arts from Home

5/1 - Virtual Nature for the Soul

5/6 - Food for Thought: Brain-Healthy Meals

<http://depts.washington.edu/mbwc/events/community-events-programs>