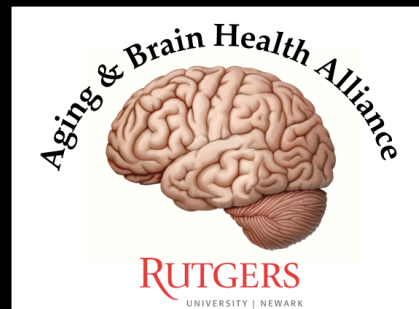


# Preserving Brain Health in Retirement

**Mark A. Gluck, PhD**

**Professor of Neuroscience & Public Health**



June 5, 2026  
Harvard University. Cambridge, MA.

# Compare These Two Mid-60s Brains



**Retired**

# **Real (Average) Data on Brain Health & Retirement**

- 1. Verbal memory declined 38% faster after retirement (Whitehall II cohort study).**
- 2. Early retirement, before 65, significantly accelerates rate of cognitive decline (US Health & Retirement Study).**
- 3. Working longer delays onset of clinical symptoms of Alzheimer's disease due to "cognitive reserve."**
- 4. Leaving work removes a primary social network. Chronic isolation is a key risk factor for dementia.**

# Avoid Falling off the Cognitive Cliff at Retirement



# We Can Learn 3 Things from Exceptional SuperAgers



# We Can Learn 3 Things from Exceptional SuperAgers

- 1. Socially engaged (*all ages*).**
- 2. Motivated by future goals.**
- 3. Prioritize their health.**



# Six Steps to a Better Memory & Reducing Risk For Alzheimer's

# Six Steps to a Better Memory & Reducing Risk For Alzheimer's

## ➔ 1. Exercise regularly



**Walk for half an hour each day.  
Get 2 1/2 hrs/week of exercise.**

# East Orange Senior Center's Silver Steppers (ages 80-92)



# Six Steps to a Better Memory & Reducing Risk For Alzheimer's

1. Exercise regularly.

➔ 2. Challenge your brain.



|   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|
|   |   | 8 | 2 | 1 |   | 7 | 4 |   |
| 1 |   |   |   | 8 |   |   |   | 2 |
| 5 | 7 | 2 |   |   | 3 | 1 | 9 |   |
| 4 |   |   |   |   |   |   | 7 |   |
|   |   | 7 |   | 3 |   | 4 |   |   |
|   | 9 |   |   |   |   |   |   | 1 |
|   | 2 | 5 | 6 |   |   | 9 | 8 | 7 |
| 6 |   |   |   | 7 |   |   |   | 3 |
|   | 8 | 1 |   | 2 | 9 | 6 |   |   |

- Read challenging books about topics that are new to you.
- Keep your mind sharp attending lectures (like this one!).
- Learn a new skill, a new language, or a new song!

*Lifestyle Recommendation*  
**Learn Something New**

**Thanks for the memory  
Of rainy afternoons, swingy Harlem tunes  
And motor trips and burning lips and  
burning toast and prunes  
How lovely it was!**

# *Lifestyle Recommendation* **Learn Something New**

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# *Lifestyle Recommendation* **Learn Something New**

Thanks \_\_\_\_\_  
Of rainy \_\_\_\_\_, swingy \_\_\_\_\_  
And motor \_\_\_\_\_ and burning \_\_\_\_\_ and  
burning \_\_\_\_\_ and \_\_\_\_\_  
How \_\_\_\_\_!



# Six Steps to a Better Memory & Reducing Risk For Alzheimer's

1. Exercise regularly

2. Challenge your brain!

➔ 3. Avoid unproductive stress.



# Stress is How We Survive a Life Threatening Danger



# **Stress is Good: *Short Term!***

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**Faster brain and body responses.**

**Focused attention.**

**Increased alertness.**

# Cost of Stress: Long Term

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**Stress hormones set body and brain to “warp drive” but are toxic to the **hippocampus**, a key brain region for memory storage.**

- **Stress releases **cortisol**, a hormone that stops growth of new cells key for learning.**
- **Women are especially vulnerable to brain damage from stress.**

# Six Steps to a Better Memory & Reducing Risk For Alzheimer's

1. Exercise regularly.
2. Challenge your brain!
3. Avoid unproductive stress.

➔ 4. Get a good night's sleep.

- Keep to a regular bedtime.
- Sleep at least 7 1/2 hours a night.
- Keep your room totally dark and cool.
- No phone or computer screens in the bedroom.
- Avoid alcohol and caffeine in the afternoon or evening.



# Six Steps to A Better Memory & Reducing Risk For Alzheimer's

1. Exercise regularly.
2. Challenge your brain!
3. Avoid unproductive stress.
4. Get a good night's sleep.

➔ **5. Socialize with others.**



- Even if you live alone, you can have a rich social life: friendship is key to brain health!
- Talking regularly with friends and family keeps your mind alive.

# Friends Also Can Fill Your Memory Gaps



# Six Steps to A Better Memory & Reducing Risk For Alzheimer's

1. Exercise regularly.
2. Challenge your brain!
3. Avoid unproductive stress.
4. Get a good night's sleep.
5. Socialize with others.

➔ 6. Eat a healthy diet.



# Six Steps to A Better Memory & Reducing Risk For Alzheimer's

1. Exercise regularly.
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5. Socialize with others.
6. Eat a healthy diet.

✓ Reduce unnecessary added sugar: it is toxic for the brain.

# How Does Sugar Affect Your Brain?

1. It over-stimulates **dopamine** in the brain, creating cravings for more sugar: a **sugar addiction**.

 Too much sugar shuts off the "*I've had enough*" circuits.

2. Disrupts insulin and sugar levels in the brain, causing **memory loss** and **impairing brain cell function**.

# Six Steps to A Better Memory & Reducing Risk For Alzheimer's

1. Exercise regularly.
2. Challenge your brain!
3. Avoid unproductive stress.
4. Get a good night's sleep.
5. Socialize with others.
6. Eat a healthy diet.



- Dark fruits: blueberries and prunes;
- Vegetables: broccoli and spinach;
- Cold water fish: tuna and salmon;
- Nuts: almonds, walnuts, and pecans;
- Beans are high in protein and a good alternative to meat.

# Six Steps to A Better Memory & Reducing Risk For Alzheimer's

1. Exercise regularly.
2. Keep mentally active.
3. Avoid unproductive stress.
4. Get a good night's sleep.
5. Socialize with others.
6. Eat a healthy diet.



**These six steps  
can reduce risk  
for Alzheimer's**

*How can I remember all 6 if  
I have a memory disorder?*

# Six Steps to A Better Memory & Reducing Risk For Alzheimer's

1. Exercise regularly.
2. Keep mentally active.
3. Avoid unproductive stress.
4. Get a good night's sleep.
5. Socialize with others.
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## Six Steps

to a Better Memory  
and Reducing Your Risk  
for Alzheimer's Disease



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[www.brainhealth.rutgers.edu](http://www.brainhealth.rutgers.edu)

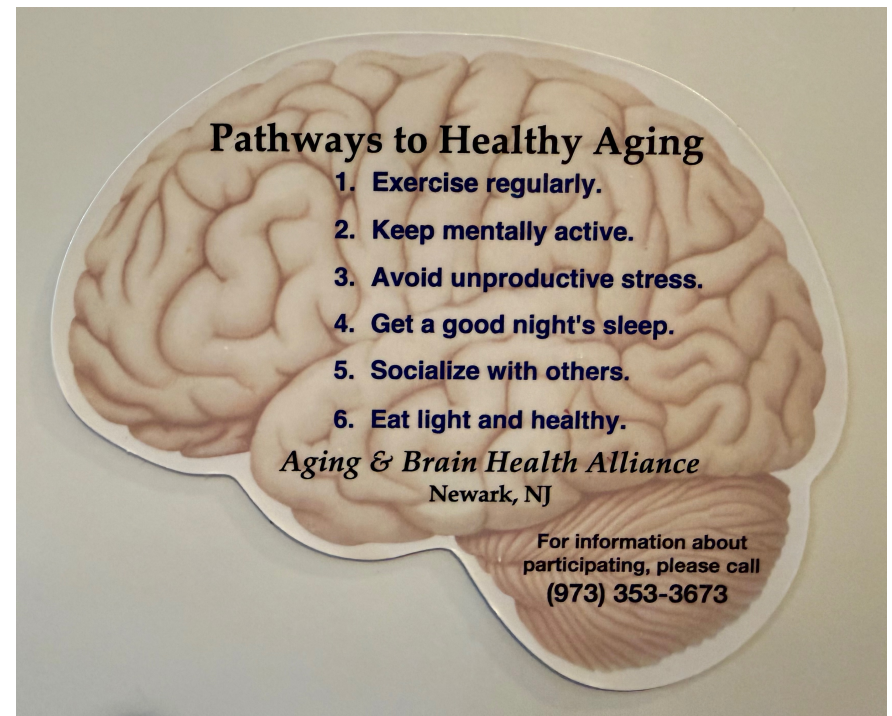
(973) 353-3673

**Mark A. Gluck, PhD**

*Professor of Neuroscience*

# Six Steps to A Better Memory & Reducing Risk For Alzheimer's

1. Exercise regularly.
2. Keep mentally active.
3. Avoid unproductive stress.
4. Get a good night's sleep.
5. Socialize with others.
6. Eat a healthy diet.



**I don't have time to do all six, is there just one thing I can do that covers all six ?**



## **Official *Harvard Class of '81* Method for Memory Enhancement and Alzheimer's Prevention**

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**Frequent vigorous sex with an intelligent partner.**

# Official *Harvard Class of '81* Method for Memory Enhancement and Alzheimer's Prevention

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1. Exercise

3. Reduce stress

**Frequent vigorous sex with an intelligent partner.**

2. Mentally active

5. Socialize with others

4 ....and sleep better at night

## Official *Harvard Class of '81* Method for Memory Enhancement and Alzheimer's Prevention

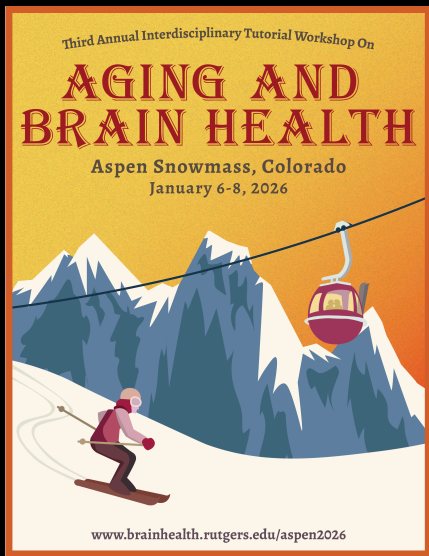
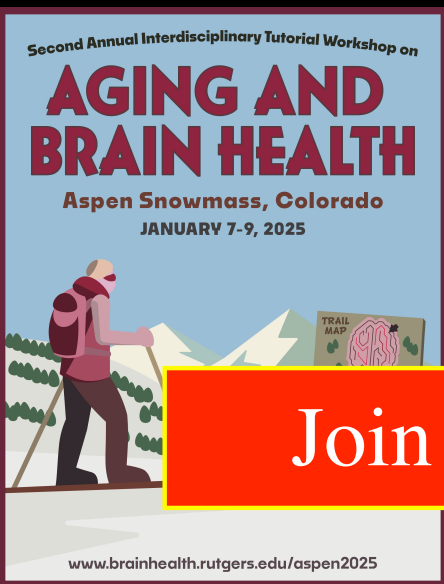
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**What's the #2 best thing to do for brain healthy aging?**



# Skiing (*w/ Helmet*) is Good for Brain Health

# Small (N=5) Unpublished Study We Did in 2017



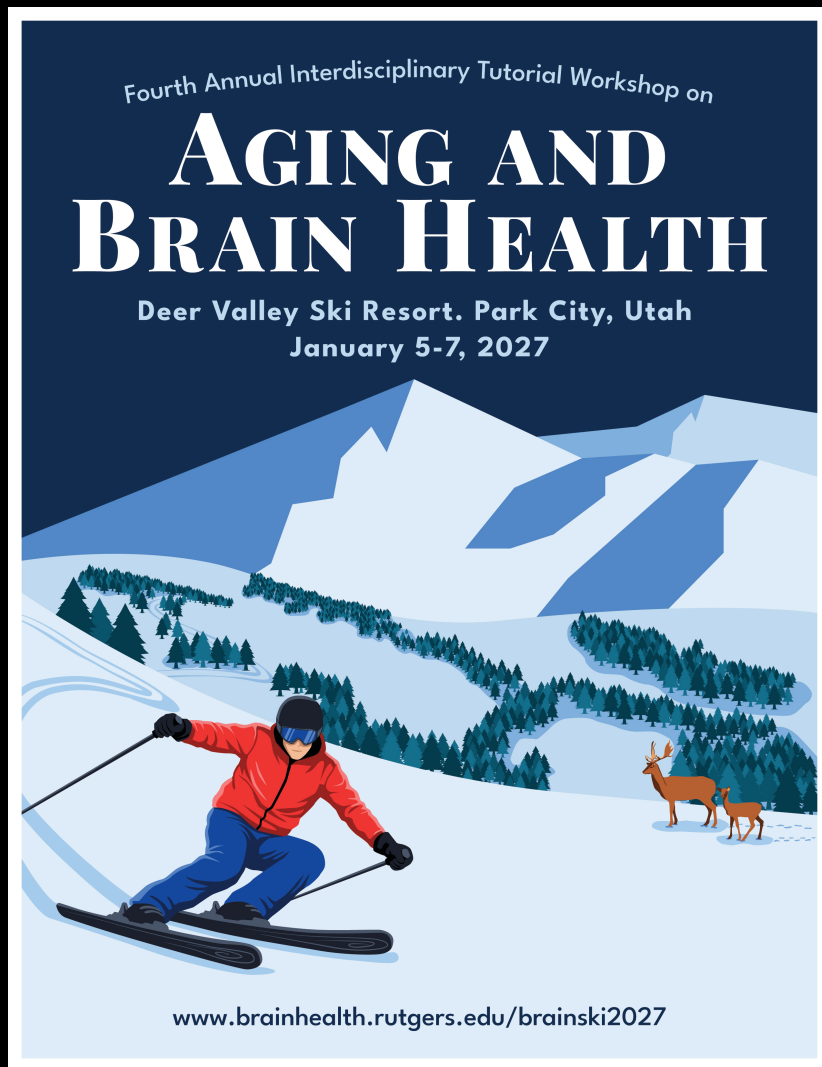
# Annual Interdisciplinary Tutorial Workshop on Aging and Brain Health

2024, 2025, 2026: Aspen, CO

January 5-7, 2027:  
Deer Valley, Utah

- First week of January every year
  - Small group: Limited to 50 people
  - From 4-7pm for three days; **ski prior!**
  - 20 broadly-accessible 12-min **tutorials**
  - General public welcome (you!)
- Thanks to donor friends: Student fellows





## Annual Interdisciplinary Tutorial Workshop on Aging and Brain Health

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- General public welcome (you!)
- Fully-funded student travel fellowships

**One final piece of advice: *You are only as old as you think you are, so why not..***



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**At Snowbird Ski Resort, Utah**

***Made possible by support from multiple grants from the NIH's National Institute on Aging (R01AG053961; R01AG08211) and both corporate and private donors.***