

Re-imagining our approach to brain health

*Wellness Wednesday
Oct 13, 2021*

Thomas J. Grabowski MD

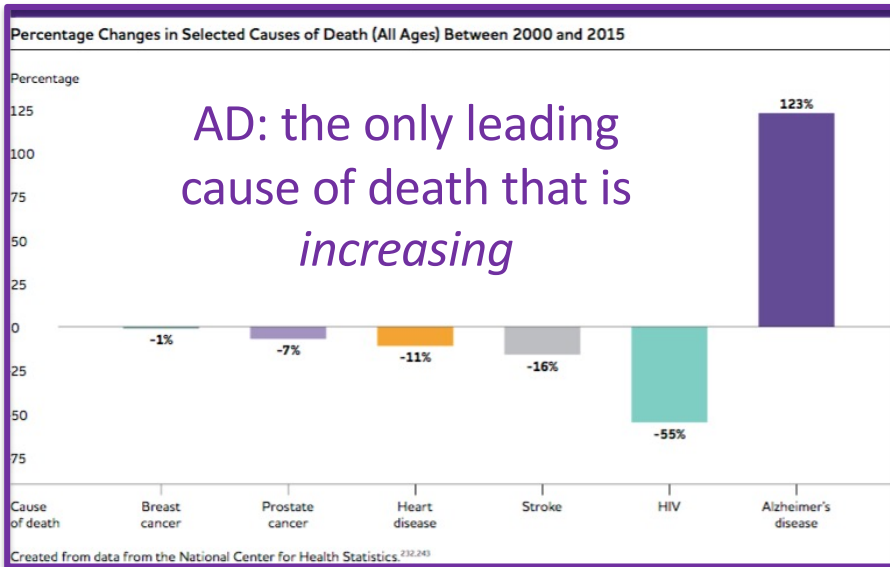
Director, UW Memory and Brain Wellness Center

Director, Alzheimer Disease Research Center

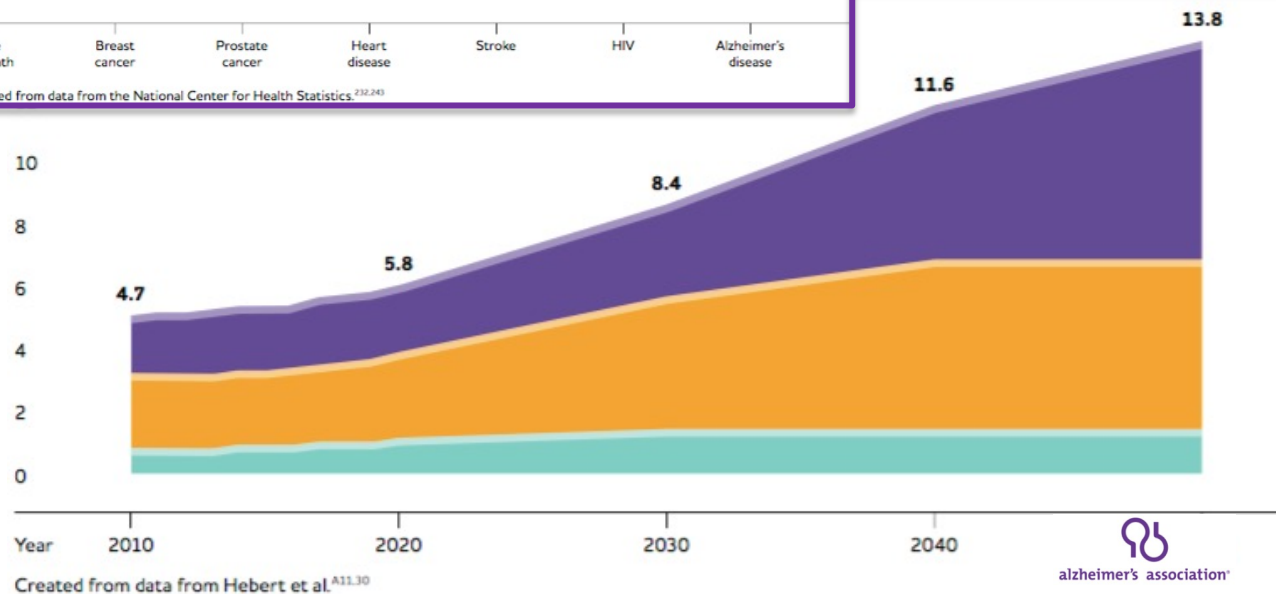
University of Washington



The Memory Hub



We all have a story
about a loved one
with Alzheimer's

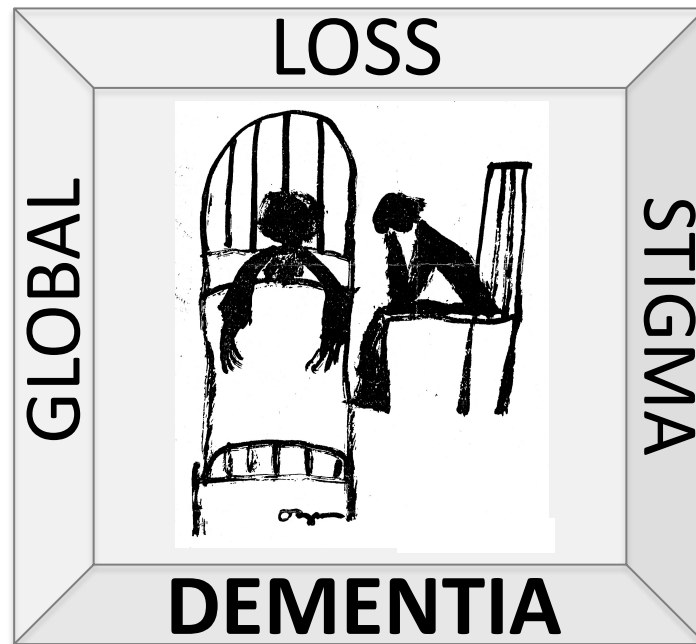


Messaging for urgent action

VS

Messaging for someone with memory loss
(or worried about it)

Alzheimer's disease



- Even though the total number of cases of dementia due to Alzheimers is increasing,
- The *rate* of Alzheimer's disease among aging people has actually declined in U.S., Europe, Japan
 - Correlates with more education
 - Probably also reflects better primary care, notably better control of hypertension

Countering the narrative of loss:

... with a positive, scientifically grounded, forward-looking view of brain health

Four big ideas

- Understanding AD across all its stages
- Building resilience to Alzheimer's disease
- Strengths-based reframing of AD
- Dementia-friendly community

What is normal cognitive aging?

- Slower thinking
- Less intense focusing of attention
- Occasional word-finding problems
- Concern about memory changes

but ...

Remembering important new material,
communication, and daily living
are not compromised

What is mild cognitive impairment?

- Concerns about memory
- Objective decline in memory or cognition
- Daily living capacity is not compromised

What is dementia?

- Objective decline in more than one domain
- Impairments of usual level of daily function

Six stages of Alzheimer's disease (Braak staging)



Stage I and II



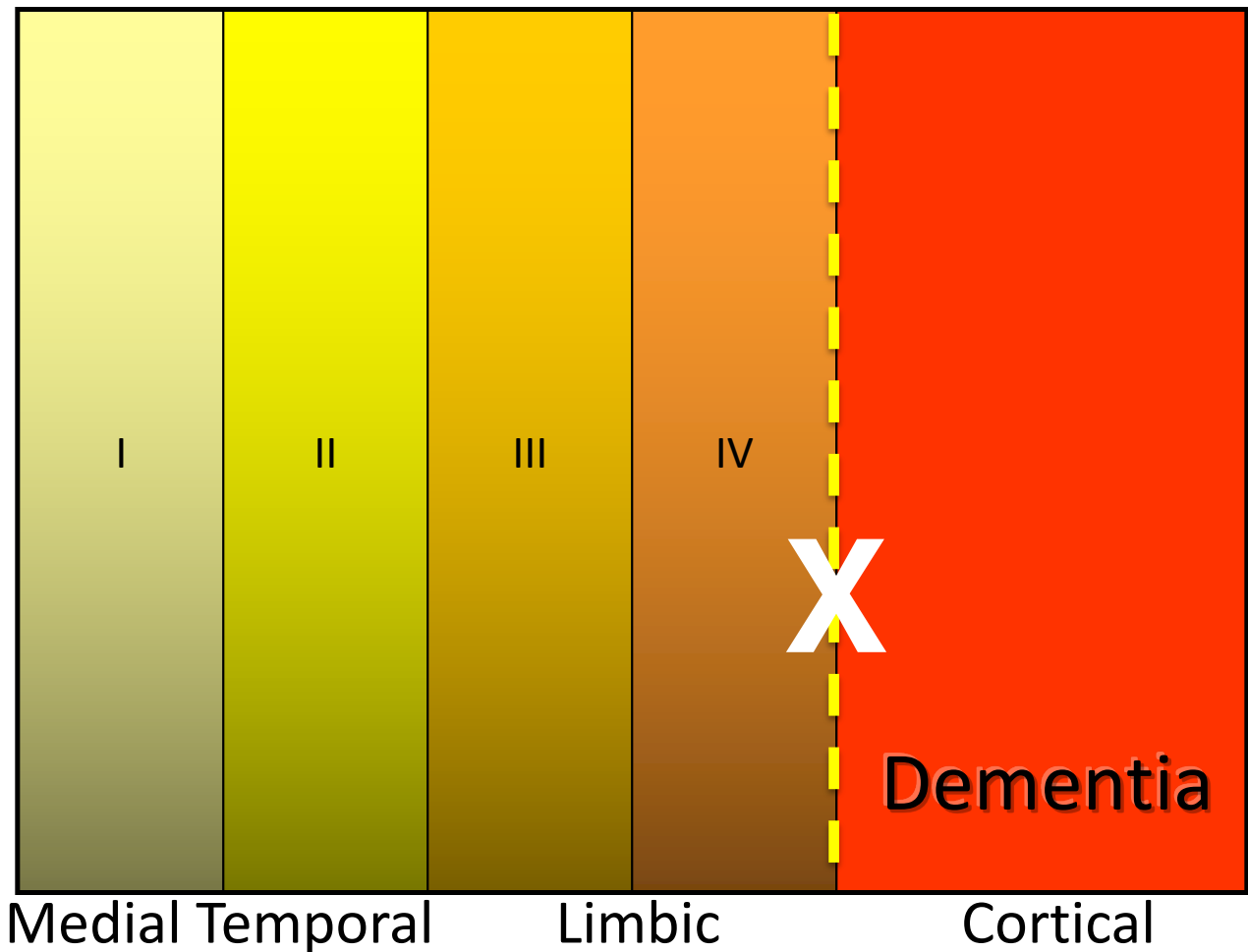
Stage III and IV



Stage V and VI

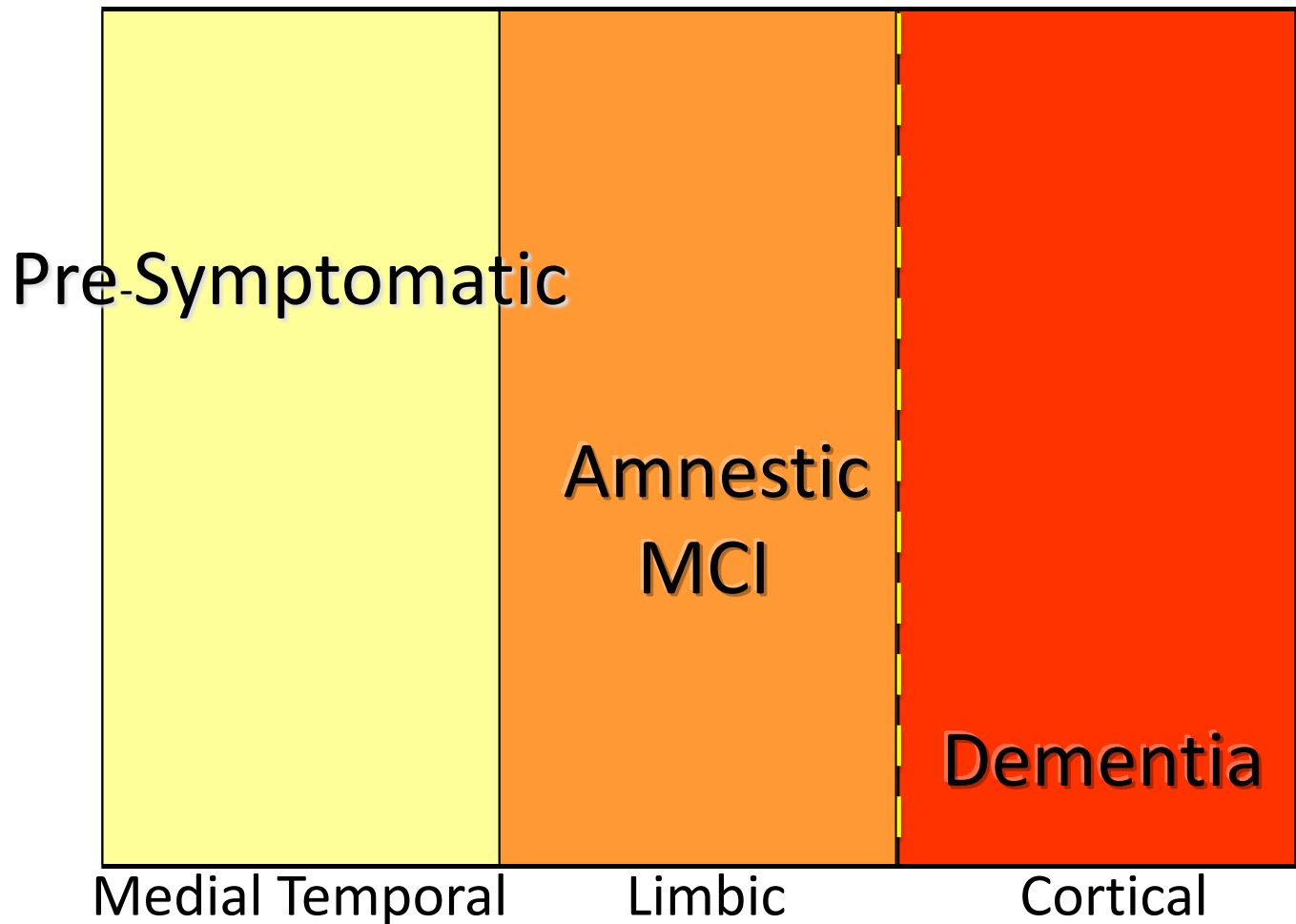


What is the plaque and tangle stage (1 to 6)
of mild/earliest Alzheimer dementia?

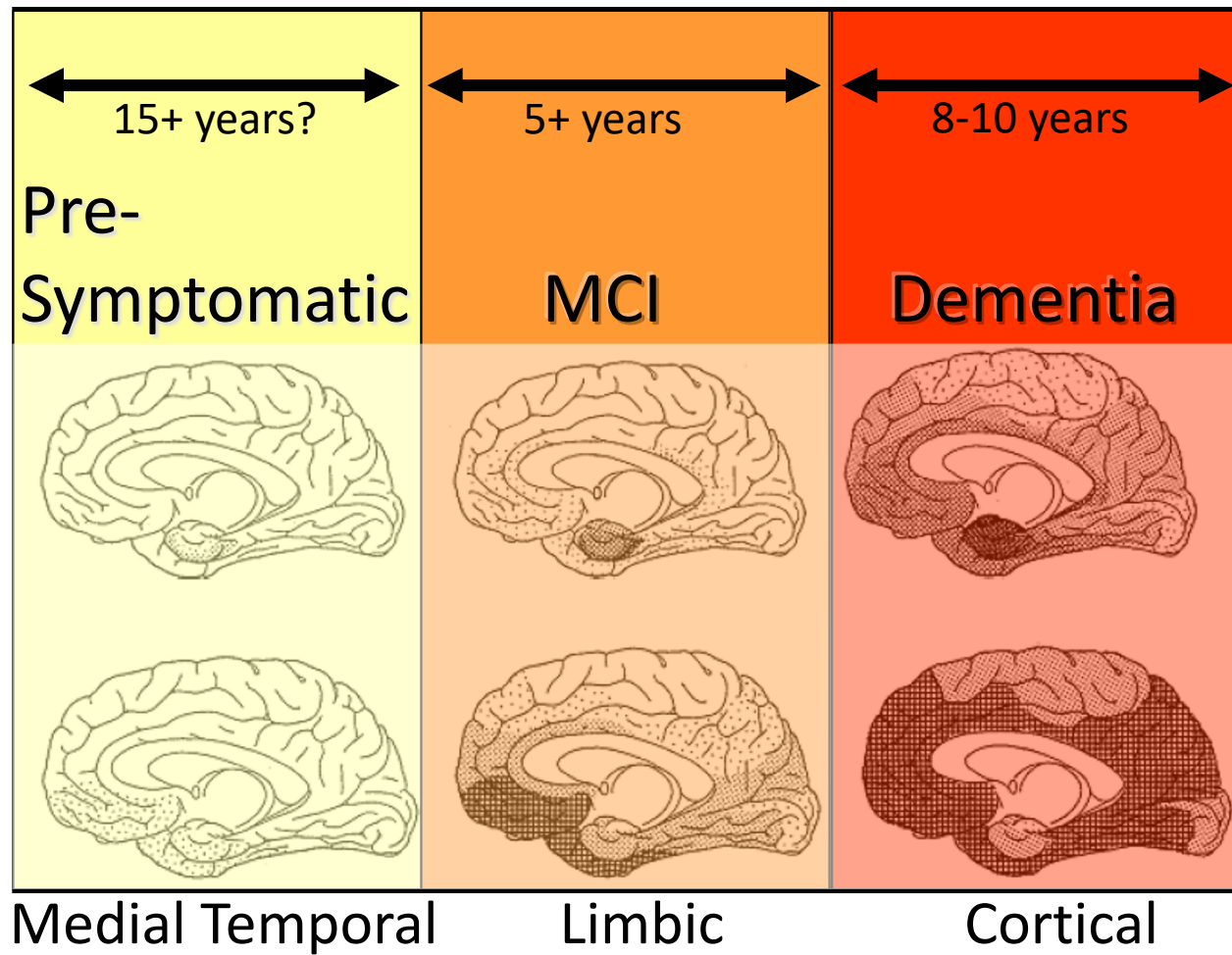


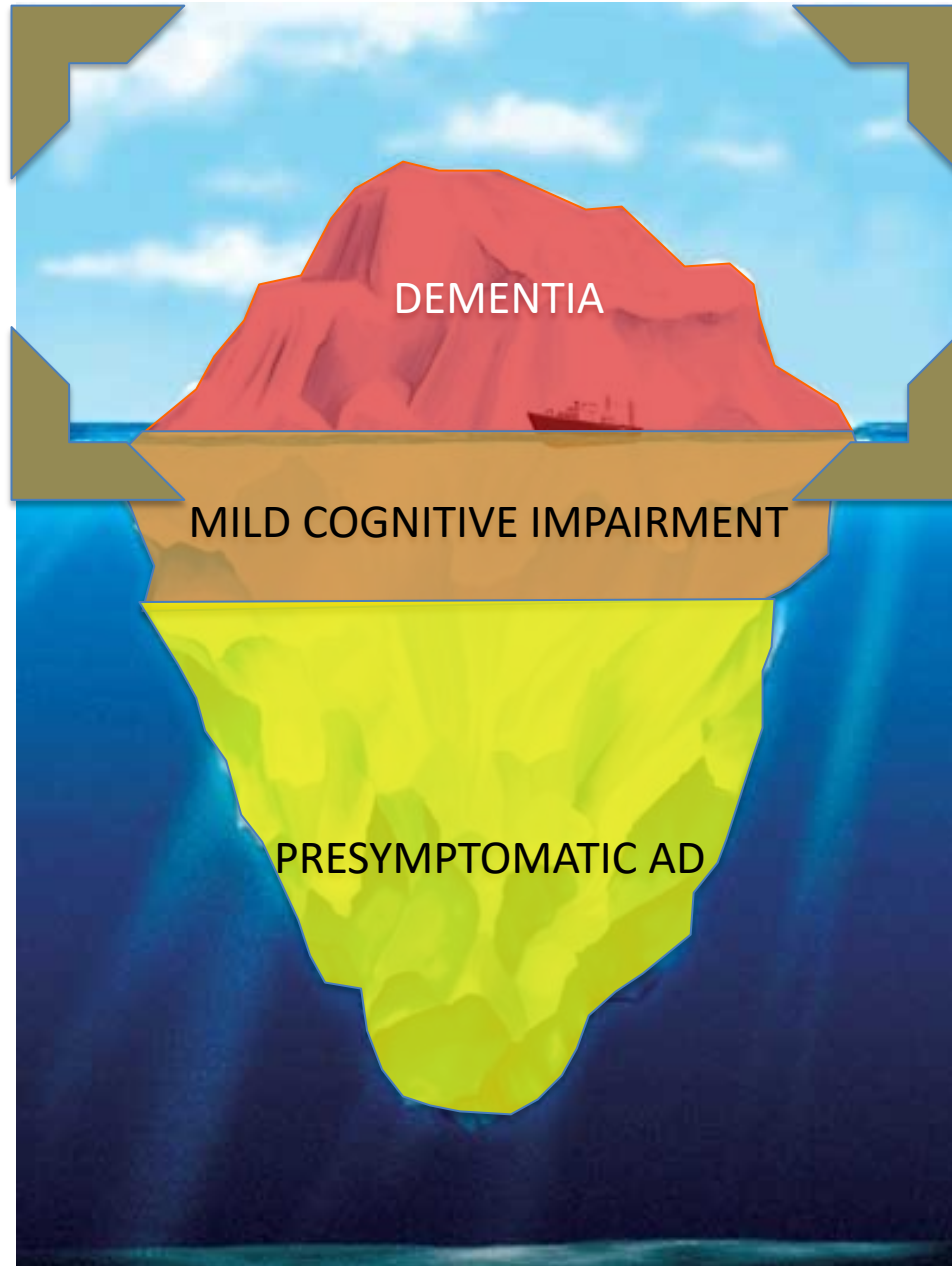
Six progressive stages of Alzheimer Disease

What is the plaque and tangle stage (1 to 6)
of mild/earliest memory loss?



Six progressive stages of Alzheimer Disease





Reframing brain aging & Alzheimer disease

Understanding AD across all its stages

- It's not possible to really separate healthy cognitive aging and preclinical Alzheimer's (without expensive research tests).
- For every person with dementia there are two with earlier stage Alzheimer's disease - up to 25% of 70 year-olds.
- There is a long preclinical period before symptoms happen
- Therefore *prevention* of dementia is a realistic strategy

Any of us may be walking this road



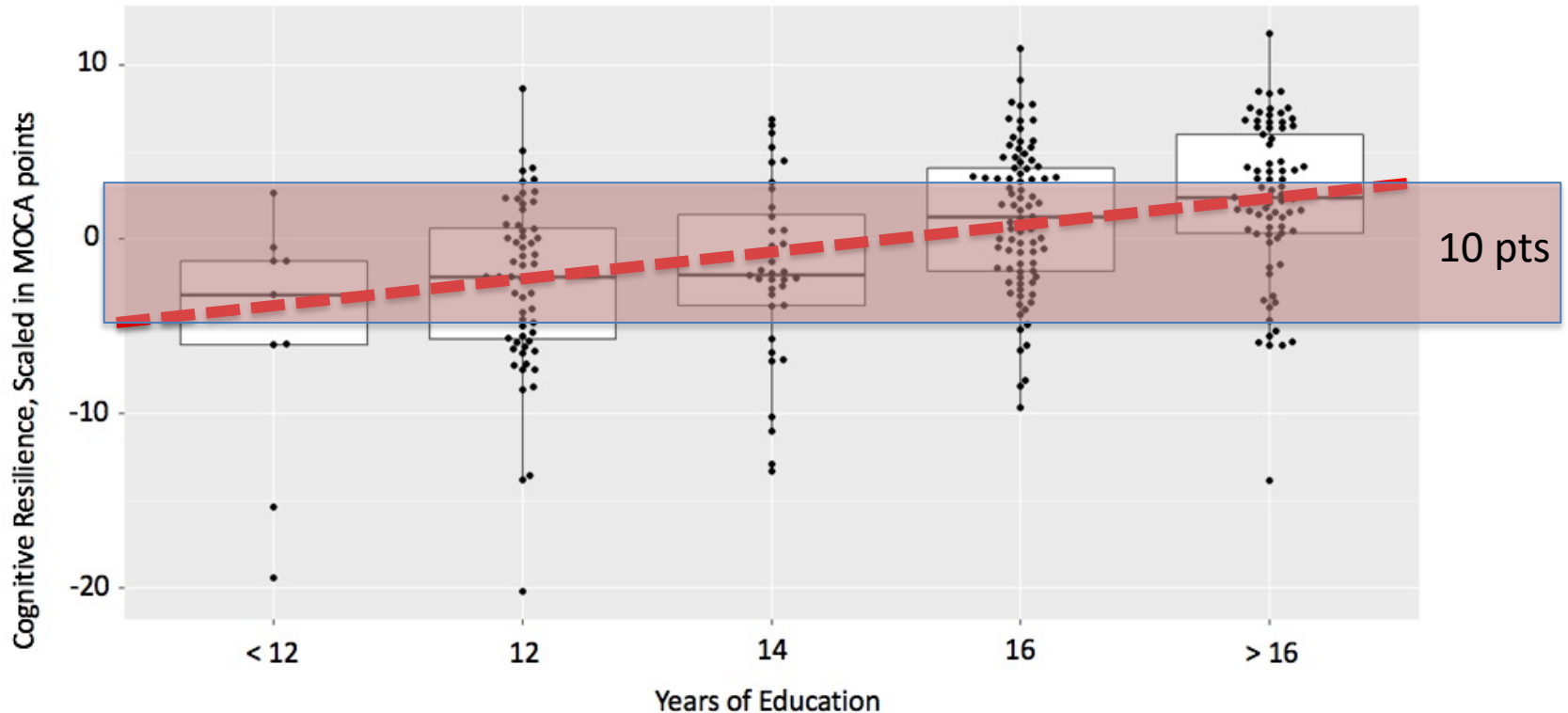
Four big ideas

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- **Building resilience to Alzheimer's disease**
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What is “Resilience”?

- An aspect of brain health
- How well your brain functions in spite of the challenge of Alzheimer’s changes
- Resilience is strongly related to lifestyle factors, over the long term

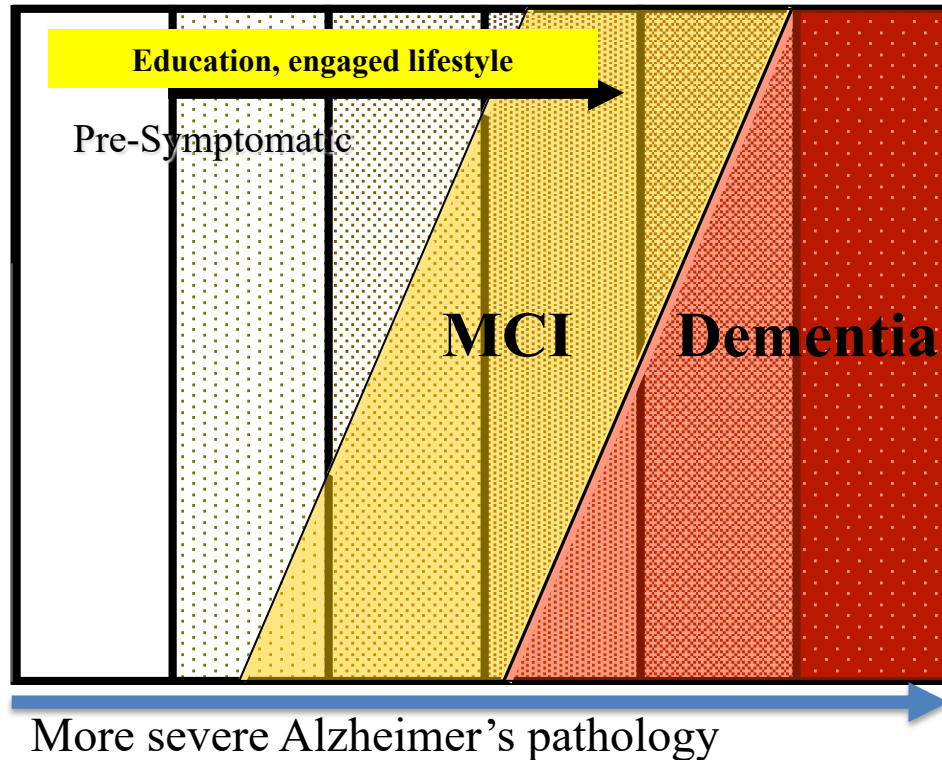
- For a given amount of brain atrophy, some people have better memory and thinking than others
- This is what we mean by “resilience” to AD
- Resilience is related to education level



- Resilience is also related to:
a challenging job, regular exercise, lively cognitive habits, social connectedness

LEANING IN

THE RELATIONSHIP OF ALZHEIMER'S CHANGES TO SYMPTOMS IS MODIFIABLE



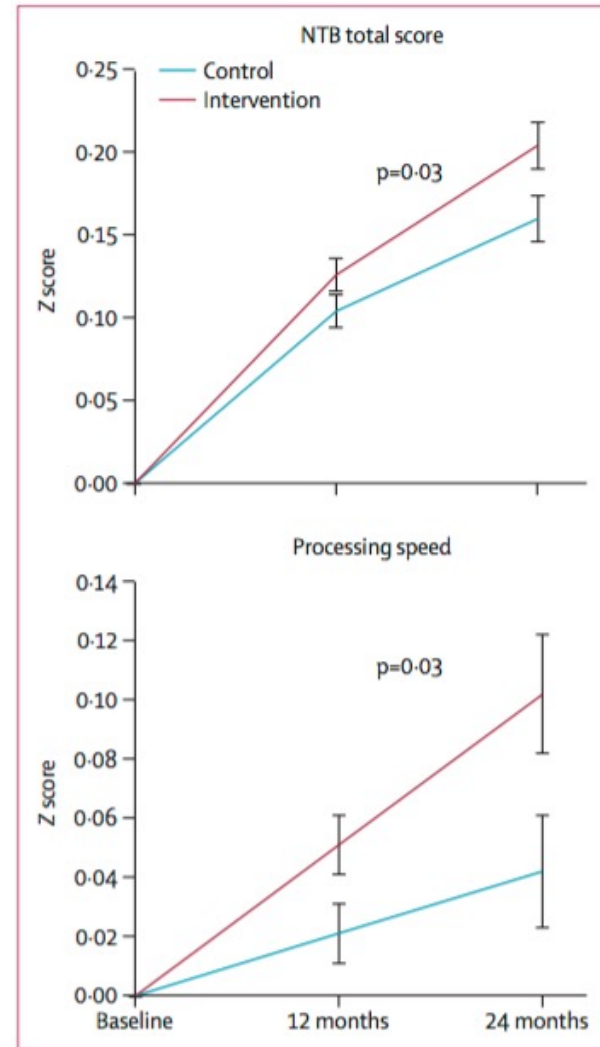
The point at which memory will tip can be delayed by **years** by lifestyle:

- Exercising the mind
- Social engagement
- Physical exercise
- Vascular health

These effects are likely to be additive with any effects of medicine in the future treatment of Alzheimer's

Finnish Geriatric Intervention Study to Prevent Cognitive Impairment and Disability (FINGER)

- 1260 Finnish seniors
- Interventions:
 - diet,
 - exercise,
 - cognitive training,
 - vascular risk monitoring



Resilience and brain health

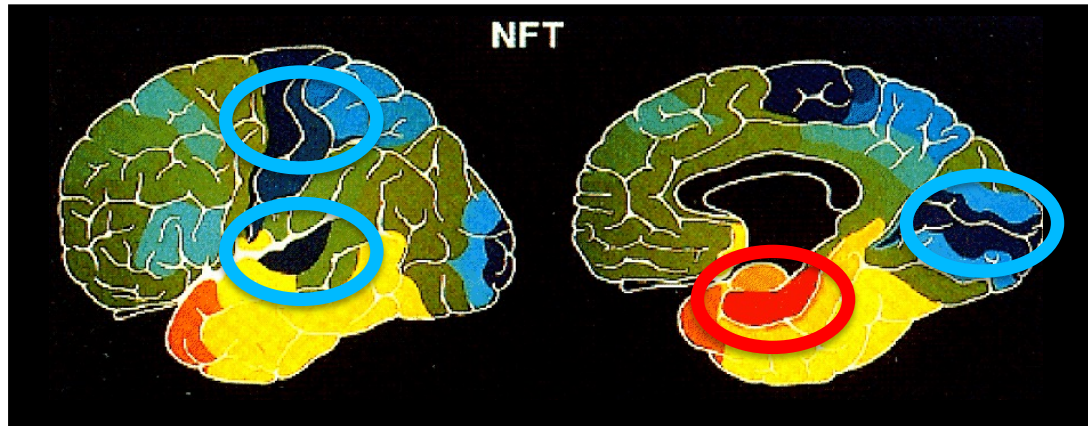
- The relationship of plaques and tangles to brain health is modifiable.
- A substantial amount of brain reserve is realistic to attain with good cognitive habits.
- Lifestyle choices can make years of difference in one's "tipping point" to get memory loss
- We can all build and maintain brain reserve.

Four big ideas

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- Building resilience to Alzheimer's disease
- **Strengths-based reframing of AD**
- Dementia-friendly community

STRENGTHS-BASED REFRAMING

... and the abilities that a person retains in the midst of them...



- Not all brain regions and systems are equally affected by degenerative changes
- Relatively spared systems are the basis for retained strengths

BRAIN REGIONS USED FOR LEARNING HABITS AND SKILLS

“PROCEDURAL MEMORY; MUSCLE MEMORY”

MEMORY FOR HOW VS. MEMORY FOR WHAT



Another retained strength: Creative impulse

THE ARTIST WITHIN – January 8 – February 26, Seattle City Hall Lobby and Anne Focke Galleries – Open M-F 7am – 6pm



THE ART *of* Alzheimer's



**Frontotemporal Dementia
Resource &
Education Day**

**Tuesday
December 11
10:30am–3pm**
Verdant Community Wellness Center
4710 150th St SW, Lynnwood

Do you or a loved one live with behavioral variant FTD? You're not alone! Join the UW Memory & Brain Wellness Center for a relaxed half-day of connection, learning, and resource-sharing.

Free event includes overview of FTD, research updates, community resources, living with FTD panel, arts and creativity showcase, and lunch.

Space is limited, register by December 7: <https://bit.ly/ftd-edu>

For more information contact Matt Becker at the UW MBWC: mbecker@uw.edu, 206-744-2057.

Offered by:
UW Medicine
MEMORY & BRAIN
WELLNESS CENTER

Sponsored by:
Rosewood Courte
MEMORIAL

Pre-Event Meet & Greet
Join the Association for Frontotemporal Degeneration (AFTD) at Curtis Restaurant the evening before! Meet others touched by FTD. Dinner provided.
5-7 pm, Monday December 10
Curtis Restaurant
621 Union St, Seattle
807P www.aftdusa.org

Summary

Strengths-based reframing of dementia

Alzheimer disease tends to spare certain brain regions, which support “retained strengths”

- *Motor and sensory abilities*
- *Learning new skills and habits*
- *Accessing memory from sensation, experiencing the world “in the moment”*
- *Creative impulse*
- *Learning in a social context*



Four big ideas

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- **Dementia-friendly community**



The Memory Hub

**A Place for Dementia-Friendly
Community, Collaboration and Impact**

What is the Memory Hub?



- A vibrant new place for dementia-friendly community, collaboration and impact, opening November 2021.
- Operated by UW Medicine on behalf of the wider memory loss community and aligned professionals



Marigrace Becker MSW



Kristoffer Rhoads PhD



Located on Seattle's First Hill in a building
owned by our partners the Frye Art Museum

1021 Columbia Avenue

Goal 1: Local Community of Support

Our wellness programs, like ADAPT

Gathering space, classrooms, art gallery,
memory garden, library

Goal 2: Collaboration and Innovation

Alzheimer's Association

Elderwise

Full Life Care

Project ECHO

Goal 3: Statewide Impact

Training programs, ZOOM room,
annual symposium



The Memory Hub



Prevention

Living with
Memory loss

Subjective
Memory Loss

MCI

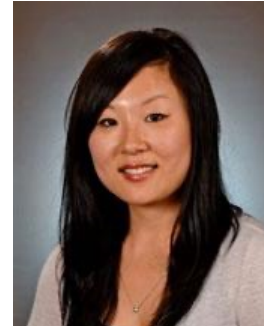


Cognitive
Reserve

Dementia

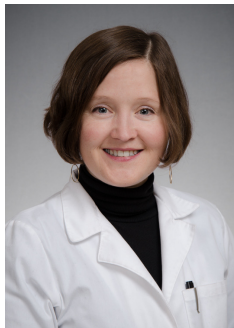
Normal
Cognition

Engaging
strengths



UW Memory and Brain Wellness Center

We envision a world in which people with memory loss live well within a community of support.



depts.washington.edu/MBWC

Questions?

Visit the Memory Hub and the Frye Art Museum
Contribute your ideas, talent, and support

Volunteer with The Memory Hub:

Contact Mari Becker, Program Manager of Community Education & Impact
(206) 744-2017, mbecker1@uw.edu

Clinical appointments –Memory and Brain Wellness Center at Harborview
(206) 520-5000 “First call appointing”

Participate in a research study:

Contact Jessica McDougall, ADRC Lead Research Coordinator
(206) 744-0588, uwadrc@uw.edu

Provide financial support: Help us do something special!

Contact Courtney Stringer, Director for Philanthropy
(206) 221-7526, stringce@uw.edu