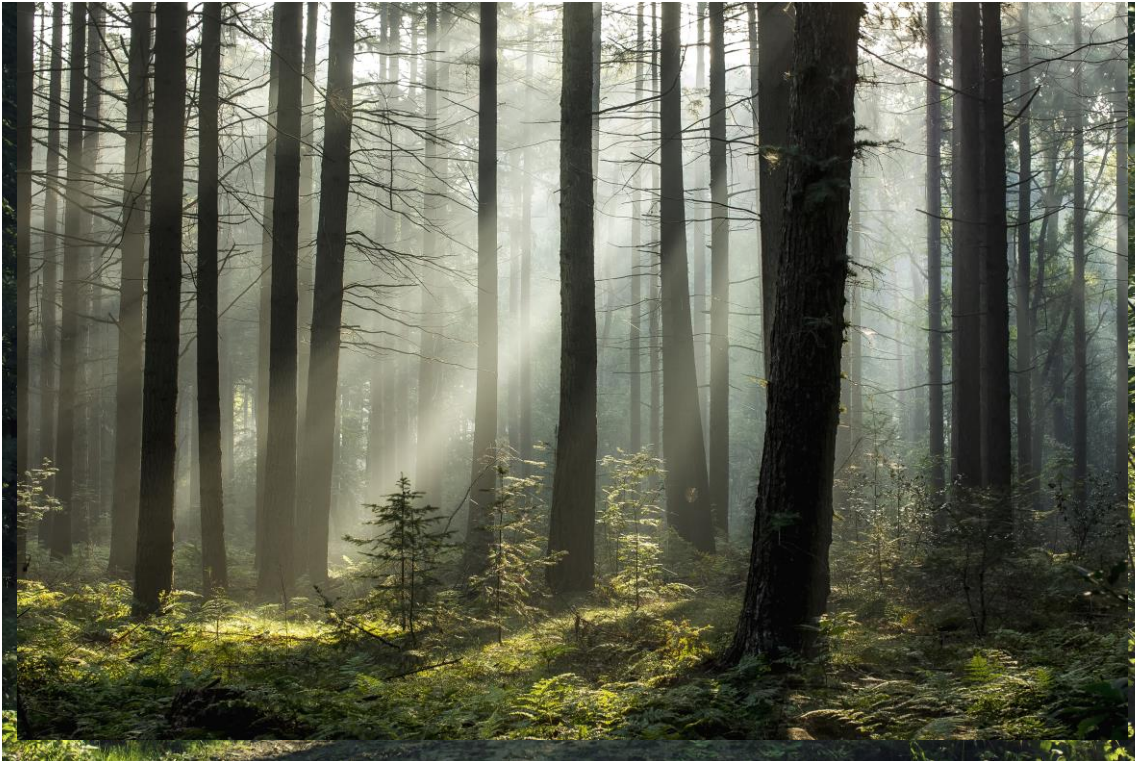




Seeing the forest through the trees...

REDUCING THE RISK OF DEMENTIA THROUGH LEARNING

The Forest of Your Brain

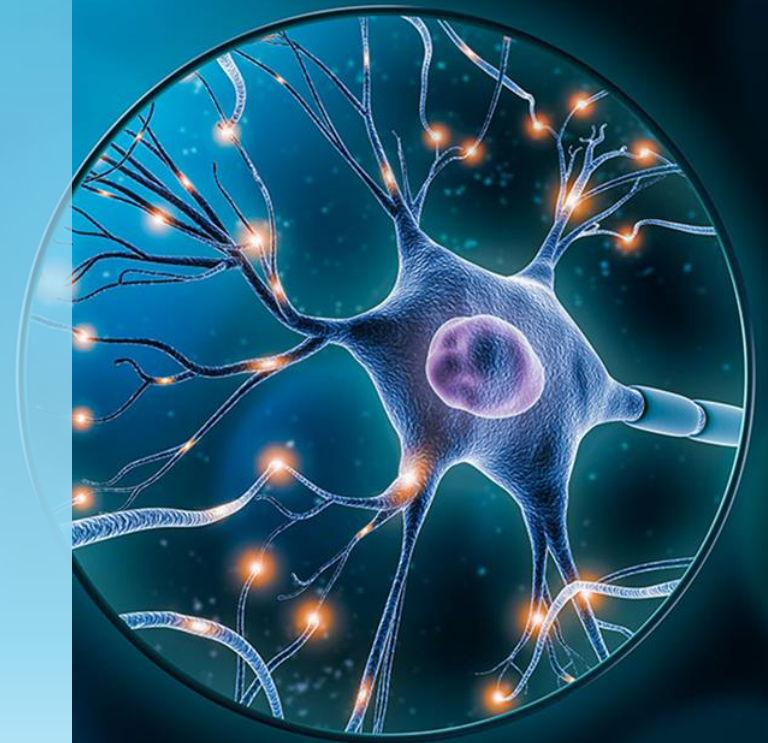


- Your brain's neuropathways are a lot like walking through a forest
- It's difficult at first because of brush, overgrowth, and exposed roots
- However, if you walk through the woods the same way many times, you create a path.
- Now it is easier to walk through the woods.
- However, if you quit walking the same path, brush will regrow with time and it will be more difficult again.

Your Brain on Learning

- Your brain is primarily composed of about 85 billion neurons
- A neuron is a cell which acts as a messenger, sending information in the form of nerve impulses (like electrical signals) to other neurons
- When you are learning, important changes take place in your brain, including the creation of new connections between your neurons.

- Neuroplasticity: The ability of your brain to change, that is to create, strengthen, weaken or dismantle connections between your neurons.



Learning Versus Memory

- ▶ Dr. Thad A. Polk, a cognitive neuroscientist and professor of psychology at the University of Michigan, defines learning as “acquiring knowledge or behavioral response from experience” and memory as “the result of the product of learning.”
- ▶ Learning is about acquiring new information and memory is the storage and retrieval of this information.

<https://www.snhu.edu/about-us/newsroom/education/learning-the-brain-and-memory>



Healthy Aging

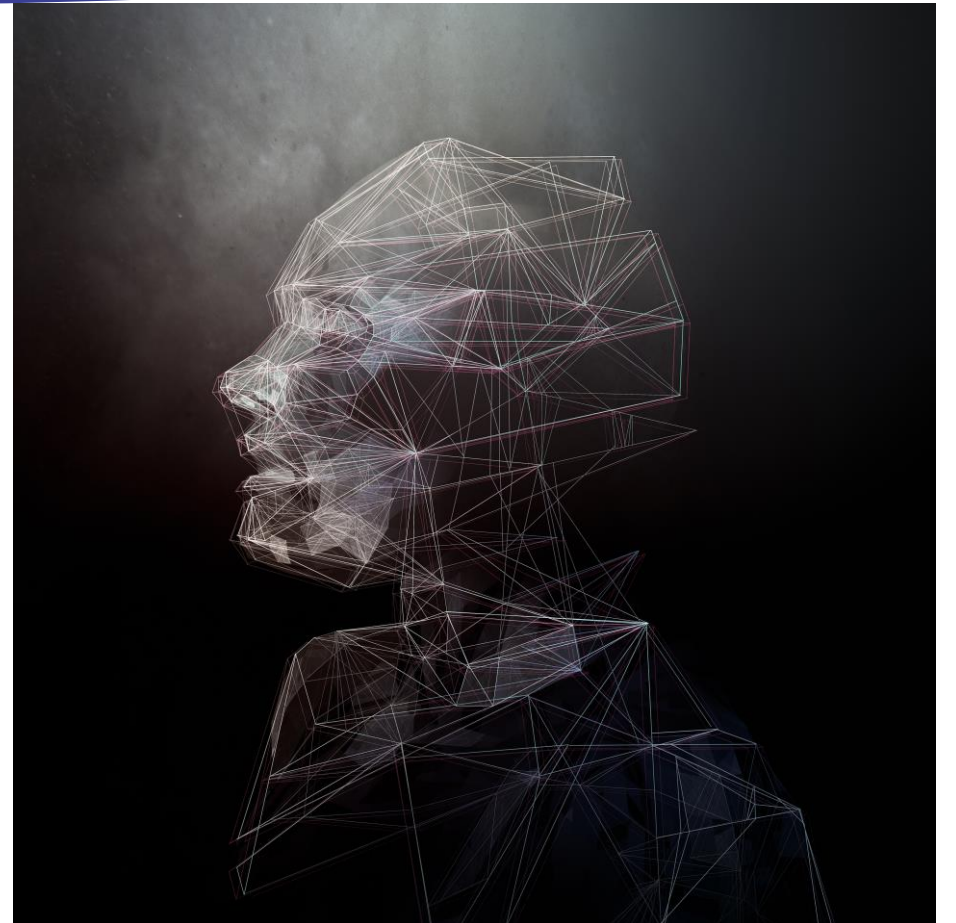
- ▶ Staying active includes intellectual stimulation and physical movement.



Our Fear of Cognitive Decline

- Dementia, a major neurocognitive disorder: effects include impaired memory and learning, problem-solving and reasoning, language, social interaction and behavior
- No current medical treatment cures dementia.
- Risk may be reduced, and onset delayed.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8482992/>



Lifelong learning opportunities help to fight cognitive decline through increasing mental stimulation and social interaction

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8482992/>



Fighting Cognitive Decline & Increasing Structural Plasticity

Mental Stimulation

- ▶ The practice context must be sufficiently difficult for the learner
- ▶ Should require focused attention
- ▶ Learning a new language or how to play an instrument, travel and exploring new places, creativity (drawing, writing, dancing, etc.) and reading.

Socialization

- ▶ Human beings are adversely affected by loneliness, reduces life span and quality of life
- ▶ Associated with poor overall cognitive performance, faster cognitive decline, a higher sensitivity to social threats and an increase in depression
- ▶ Enhancing social participation can help to prevent cognitive decline and reduce the risk for dementia.

Members of Lifelong Learning increase their cognitive fitness through their participation in courses and social connections through their interactions with other members.



Photo by Getty Images

<https://tickertape.tdameritrade.com/retirement/life-long-learning-classes-for-seniors-in-retirement-17408>

Can you
teach an old
dog new
tricks?



https://medium.com/@adrianmartin_3060/mature-education-can-you-teach-an-old-dog-new-tricks-df9be9ac3e9ad



LIFELONG LEARNING AMONG 45+ ADULTS

MARCH 2022

Barriers to Lifelong Learning

[AARP.ORG/RESEARCH](https://www.aarp.org/research)

1. Cost
2. Lack of time
3. Fear of 'ageism'



Drivers of Life-Long Learning

n - 1516

Internal motivation: 88%

- ▶ Health & mental well-being (66%)
- ▶ Learning (57%)
- ▶ Positive attitude (55%)
- ▶ Achievement (49%)
- ▶ Creative (44%)

External Motivation (46%)

- ▶ Social (30%)
- ▶ Incentive/financial (25%)
- ▶ Power/influence (5%)
- ▶ Fear (3%)

“

Do you know about
Midcoast Senior College?

”

WHERE LEARNING NEVER ENDS . . . FOR SENIORS 50 YEARS OLD AND OLDER



Take a course in our Fall or Spring terms

- ▶ Offerings include literature, history, science, the arts, and more...
- ▶ No exams, no grades, just a lifelong love for learning is required!
- ▶ Fees are affordable
- ▶ Classes meet in-person and on-line using Zoom



Enjoy a Free Lecture in our Winter and Summer Wisdom Series

- ▶ Presented on Wednesdays in January/February and June
- ▶ Special guest presenters on a variety of topics
- ▶ Free one-hour special lectures



Join MSC and your Peers for an exciting Excursion

- ▶ Summer excursions to Maine points of interest
- ▶ Specially priced tickets to events
- ▶ Social opportunities to meet senior college members



Attend a Special-Interest Club or Group

- ▶ **Writer's Group, the "Senior Scribblers"** meets biweekly
- ▶ **Book Talk, a sharing of favorite reads and titles** meets on-line
- ▶ **Current Events, a forum for topical discussions** meets weekly

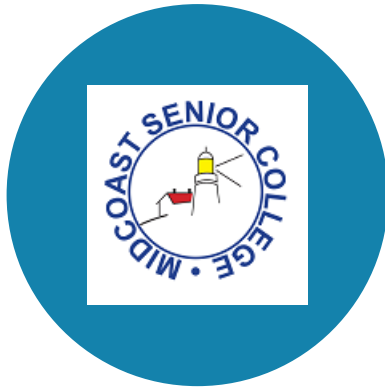


Visit Us to Learn More...

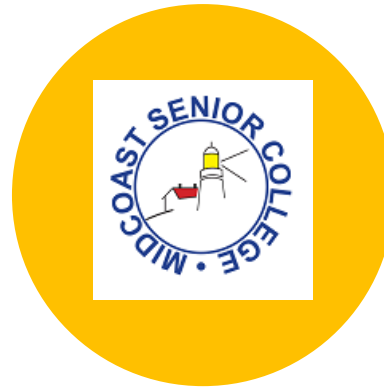
- ▶ For more information, visit www.midcoastseniorcollege.org
- ▶ Call us at 207-729-4900, or
- ▶ Email us at mscoffice@midcoastseniorcollege.org



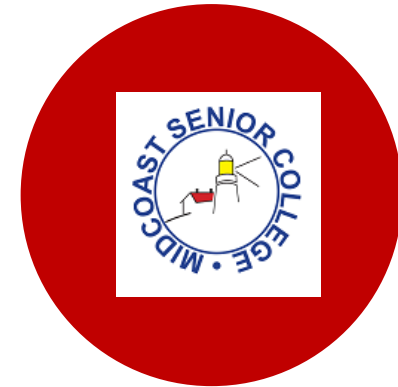
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MEMBER BOARD OF DIRECTORS**



**COMMITTEES, TEACHERS, AND
BOARD MEMBERS ARE
VOLUNTEERS**



**JOIN AS A STUDENT, TEACHER,
BOARD MEMBER, VOLUNTEER
TODAY!**