

## About the Memory & Aging Program

The Memory & Aging Program of Butler Hospital is dedicated to developing new treatments that improve the quality of life for patients and families dealing with memory loss.

The program, founded in 1997, combines the highest quality clinical care with the latest research into slowing the progression of memory loss.

Our team consists of neurologists, neuropsychologists, psychiatrists, and nurses. We are located on the campus of Butler Hospital in Providence, RI and affiliated with Brown Medical School.



# Memory & Aging Program

Stephen P. Salloway, MD, MS  
Director,  
Memory & Aging Program  
Director of Neurology  
Butler Hospital  
Professor of  
Clinical Neurosciences  
Brown Medical School

Paul Malloy, PhD  
Co-Director,  
Memory Disorders Program  
Director of Psychology  
Butler Hospital  
Associate Professor of  
Psychiatry & Human Behavior  
Brown Medical School

401-455-6402


[www.memorydisorder.org](http://www.memorydisorder.org)


Butler Hospital  
345 Blackstone Blvd  
Providence, RI 02906

Amyloid and Beyond:  
New Approaches to  
Slowing the  
Progression of  
Alzheimer's Disease



## Memory & Aging Program

 A program of Butler Hospital  
(A Care New England Partner)

 Affiliated with  
Brown Medical School

*Memories should last a lifetime*

## What Causes Alzheimer's Disease?

The memory loss in Alzheimer's disease (AD) is caused by the build up of proteins in the brain. One of the key proteins contributing to this disease process is called amyloid.

## What is the Role of Amyloid in AD?

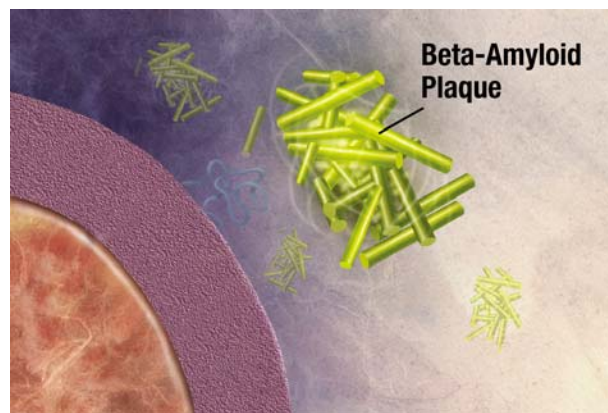
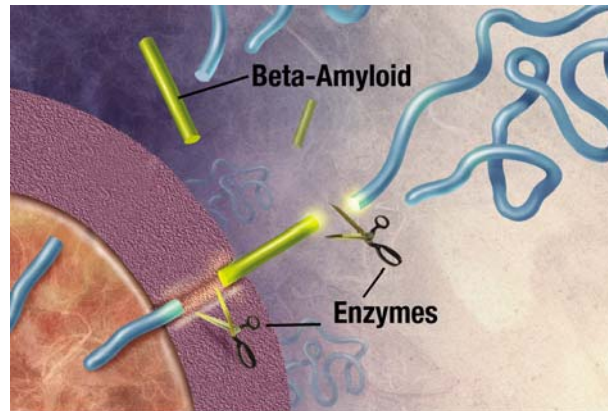
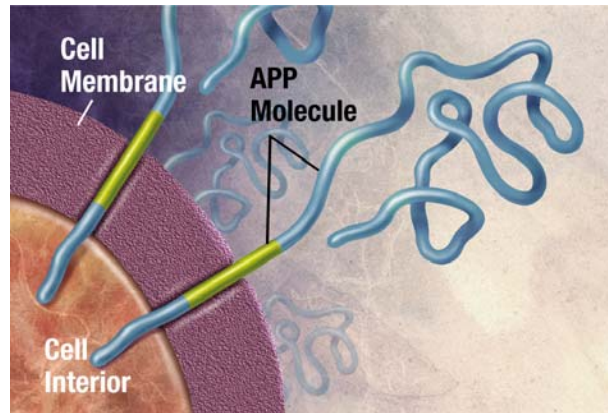
Amyloid is a protein normally found in the brain and is made from a larger protein called *amyloid-precursor protein (APP)*. In Alzheimer's disease, small pieces, called *beta-amyloid*, are cut from APP and form plaques in the brain. Amyloid plaques build up in the brain, interfering with the ability of nerve cells to communicate with each other. This causes memory loss in patients with Alzheimer's disease.

## Can Amyloid Be Lowered in the Brain?

New treatments are being developed to lower amyloid in the brain

- One approach is designed to stop enzymes from converting APP into its toxic beta-amyloid form.
- Another involves binding up the toxic part of the amyloid making it easier for it to be removed.
- A third approach stimulates the patients immune system to remove amyloid.

## How Amyloid Builds Up in the Brain



- A fourth strategy interferes with the clumping of beta amyloid into plaques.

## Are There Other Approaches to Slow the Progression of Alzheimer's Disease?

- Hormones may be elevated in the brains of people with Alzheimer's disease, causing abnormal cell division. Lowering these hormones may slow the progression of memory loss.

---

## Web Resources

- [www.alz.org](http://www.alz.org)
  - [www.myriad.com](http://www.myriad.com)
  - [www.elan.com](http://www.elan.com)
  - [www.voyagerpharma.com](http://www.voyagerpharma.com)
  - [www.jci.org/cgi/content/full/110/10/1375](http://www.jci.org/cgi/content/full/110/10/1375)
- 

Without treatment, the symptoms of Alzheimer's disease progress gradually over time and these new approaches are designed to slow the progression.

For more information, call:

**401-455-6402**

Or visit us on the web at  
[www.memorydisorder.org](http://www.memorydisorder.org)