

# Brain News

CENTER FOR BRAIN HEALTH NEWSLETTER | SUMMER 2018

## DIRECTOR'S WELCOME

Smita Patel, DO

Medical Director of the NorthShore Center for Brain Health



Dear Readers,

I am overjoyed to announce that I've been named the Director of the Center for Brain Health at NorthShore Neurological Institute. Having been involved with this important preventative health initiative from its inception, I am delighted to assume this new role. Center for Brain Health began as a bold idea, stemming from the growing

body of scientific and medical evidence suggesting that risk of Alzheimer's disease and related dementias is governed by factors, both genetic and modifiable. With this in mind, we set out to create a unique clinical service, one that would be accessible for individuals who are worried about their increased risk of Alzheimer's because of family history or the presence of risk factors like sleep problems, diabetes, hypertension or obesity. I am driven by my passion for treating the whole person, viewing Alzheimer's disease beyond a single entity but rather as a spectrum of issues that may need to be addressed. And I am most passionate about empowering my patients to be proactive about their cognitive health and wellbeing.

**"I am driven by my passion for treating the whole person, viewing Alzheimer's disease beyond a single entity but rather as a spectrum of issues that may need to be addressed."**

In the three years since the launch, Center for Brain Health is now a vibrant neurology practice managing the brain health of more than 500 individuals. It is with ever-growing enthusiasm toward Alzheimer's prevention that I look forward to the years ahead as we work together to reduce risks, increase protective factors and ultimately prevent the onset of Alzheimer's.

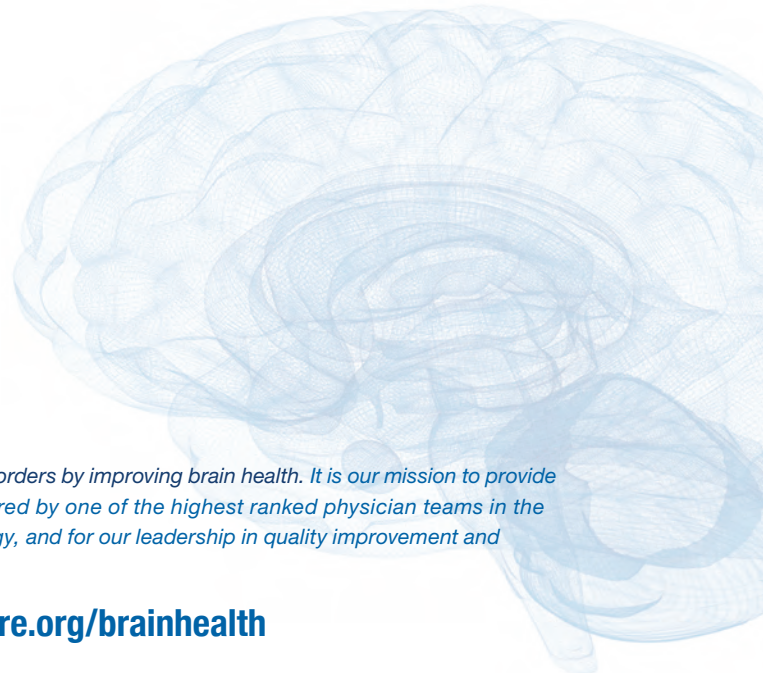
Yours, in good brain health,

Smita Patel, DO

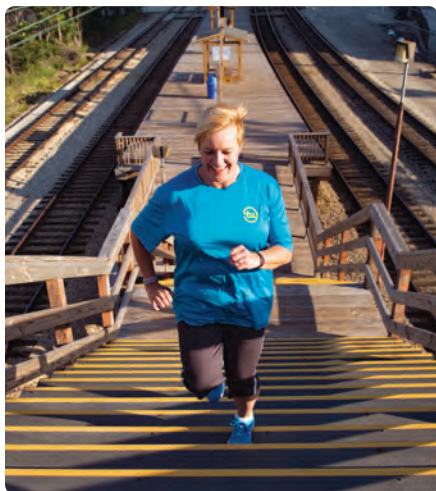
*The Center for Brain Health aims to prevent Alzheimer's and related brain disorders by improving brain health. It is our mission to provide an extraordinary neurological healthcare experience to every patient—delivered by one of the highest ranked physician teams in the nation. We are internationally recognized for our innovative use of technology, and for our leadership in quality improvement and practice-based research.*

**Learn more at 847-503-4CBH or online at [northshore.org/brainhealth](http://northshore.org/brainhealth)**

To opt out of future mailings of BrainNews please email [BrainHealth@northshore.org](mailto:BrainHealth@northshore.org).



## Seeking Alzheimer's Answers Part 2: Reducing the Risk



When last we met Chicago resident Christiane Shaughnessy, she was awaiting results from a genetic risk test she'd taken through the Center for Brain Health at NorthShore University HealthSystem. She felt compelled to take the test because her father was diagnosed with Alzheimer's disease at age 60.

She recalls walking downstairs one day to see her father standing in the mudroom in his socks, looking at his shoes. In that moment, Christiane saw the confusion on

his face. Unnoticed, she stopped to watch him as he tried to figure out if he was coming or going.

**“You’ve got the resources.  
Fix what you can fix.”  
- Christiane Shaughnessy**

The moment passed quickly, but it stuck with her, highlighting how easily Alzheimer's can abduct a person's intellectual awareness.

Christiane's test came back positive for a gene variation linked with Alzheimer's—Apolipoprotein E-4, or APOE e4. Christiane runs a 30 percent risk of developing Alzheimer's. People not carrying APOE e4 have an 8 to 10 percent risk.

Research suggests that while anyone can benefit from the lifestyle changes that reduce risk of Alzheimer's disease, people who carry APOE e4 may stand to benefit the most from them, including:

- Improving sleep quality
- Engaging in regular aerobic exercise
- Achieving an advanced education
- Staying socially active
- Being a lifelong learner
- Adopting a Mediterranean diet

“I have to pay attention to my lifestyle. I'm tackling the problem from all sides,” she explains, adding that she has worked to shed more than 30 lbs. in eight months. She also signed up for a triathlon, which takes place later this year.

In addition to the physical challenge, Christiane is looking for ways to keep mentally active, so she's considering learning Arabic or sign language, and is looking for more challenging books to read.

She's also evangelizing. Having witnessed Alzheimer's, she talks openly about her experience and encourages people to pursue early testing and intervention, eat a Mediterranean diet, exercise and keep learning.

“If God gives you resources like the NorthShore Center for Brain Health, you should use them to your best advantage,” she says. “You've got the resources. Fix what you can fix.”

## Mediterranean Salmon en Papillote

Emmaline Rasmussen, MS, RD, LDN, registered dietitian at the NorthShore Neurological Institute, recommends this colorful, nutrient-dense recipe for the whole family. In addition to brain-boosting omega-3s, fish are rich in antioxidants and heart-healthy minerals.

Fish are a powerful source of protein, and the Center for Brain Health recommends three servings per week as part of a Mediterranean diet. When choosing fish, aim for those with the highest omega-3 content, like Atlantic Mackerel, Rainbow trout, Herring, Salmon or Sardines.

### INGREDIENTS

- 4 center-cut salmon filets, 4 to 6 oz. each
- 1 fennel bulb, thinly sliced (save the green tops, or fennel “fronds,” for later)
- 2 cups cherry tomatoes
- 2 large leeks (white to very light green parts only), thinly sliced and rinsed well
- 1 ½ cups raw baby spinach
- 1 lemon, thinly sliced
- Juice of 1 lemon (fresh squeezed)
- ¾ cup pitted Kalamata olives
- 4 tsp. olive oil
- White wine (optional)
- Salt & pepper, to taste
- Parchment paper, baking sheet(s)

### DIRECTIONS

1. Preheat oven to 375 degrees.
2. Fold a 20-inch sheet of parchment paper in half and cut a large heart shape out of it. Do this 3 more times, making 1 heart for each salmon filet.
3. Place ¼ of the fennel bulb slices, ¼ of the baby spinach leaves, and ¼ of the leek slices on the center of the parchment paper heart, near the fold. Repeat 3 times for each of the 4 parchment paper hearts until you've used up all the fennel, leeks and spinach.
4. Place 2 thin lemon slices on top of the vegetables, side by side. Do this for each of the 4 parchment paper hearts.





5. Place 1 salmon filet on top of each pile of vegetables/lemon slices.
6. Arrange ½ cup cherry tomatoes and a few Kalamata olives around each filet, until there are no more cherry tomatoes or Kalamata olives remaining.
7. Drizzle ¼ of the lemon juice and 1 tsp. of the olive oil over each filet. Drizzle a small amount of white wine over each as well, if desired.
8. Season with salt and pepper.
9. Top with 1-2 more thin lemon slices and sprinkle a couple pieces of the green fennel tops, or “fronds,” onto each filet.
10. Fold the edges of the parchment paper together to seal the edges and enclose the salmon filet. Begin at the point of the heart and continue creating small overlapping folds until you reach the top of the heart. Twist the ends to ensure a tight seal. Repeat for the other 3 salmon filets.
11. Carefully transfer the parchment paper “bags” of salmon onto a baking sheet and bake in the pre-heated oven for approximately 10-15 minutes or until the salmon is cooked to a minimum internal temperature of 145°F. The parchment paper should brown slightly and may puff up as the fish cooks and the bags fill with steam.
12. Carefully remove the parchment bags from baking sheet and place each onto a plate. When ready to eat, carefully cut the bags open with a knife to allow the steam to escape, then enjoy directly from the parchment paper.

**For more healthy recipes and eating tips and to see a video of this recipe, check out NorthShore's Healthy You blog at [northshore.org/healthy-you/fresh-recipe-mediterranean-salmon-en-papillote/](http://northshore.org/healthy-you/fresh-recipe-mediterranean-salmon-en-papillote/)**

**If you try this recipe, Emmaline would love to hear what you think—and she'd love to see the final product! Share a photo with us on Instagram or Twitter, using hashtag [#healthyfoodhealthybrain](https://www.instagram.com/healthyfoodhealthybrain)**



## LIFESTYLE

### Why are women at increased risk of Alzheimer's disease?

Statistics tell us that women have double the risk of Alzheimer's disease compared to men. One in 10 men is expected to get Alzheimer's, but for women it's one in five. Why? We asked Anne Marie Morgan, MPH, who is a Senior Clinical Research Associate at the Center for Brain Health for more insight.



#### **Q: Why do women have increased risk?**

It's true that women have increased risk compared to men, but the reasons for this are still being studied, and we have more to learn. A long-standing idea is that this extra risk is due to women tending to live longer than men. Since age is the strongest risk factor for developing Alzheimer's, it stands to reason that more women will develop it.

#### **Q: Does estrogen play a role?**

Some studies show that women who had early menopause or who had removal of their ovaries before the average age of menopause, which is 51, have an increased risk of Alzheimer's. And other studies show if you supplement estrogen in these women up until age 51, that increased risk goes away. These studies and others suggest that estrogen is neuroprotective and that its reduction due to menopause may increase women's risk.

#### **Q: What other factors are involved?**

There could be a broader social phenomenon at play with regard to women's risk of Alzheimer's. The gap in risk between men and women may have something to do with education, work, and the lifestyles common to women who came of age before the 1970s, or perhaps even 1980s. We know from research that people who are bilingual are less likely to develop Alzheimer's and that people who retire late, have intellectually challenging jobs or were managers at work are also less likely to develop Alzheimer's.

Statistical studies tell us that we can blame more cases of Alzheimer's around the world on a lack of formal education than on any other modifiable factor. All of this suggests that advanced education and cognitive challenges throughout life protect against Alzheimer's either by increasing the brain's resilience against disease ('cognitive reserve' or 'neuroplasticity') or by making it more likely to live a healthier life in general, or both.

Current U.S. Alzheimer's statistics reflect the generation of women born in the late 1920s, '30s and '40s, when the gender gap in education and career was much wider than it was in later decades and certainly wider than it is today. It will be interesting to see if this extra risk women face will diminish as more highly educated and career-focused cohorts of women age.

# Did You Know?



## 5.7 million

estimated number of Americans living with Alzheimer's in 2018, according to the Alzheimer's Association.

## The burden of Alzheimer's disease is growing

in the United States and in many other nations due to "successful aging" or reduced mortality from other major causes of death such as heart disease.

From 2000 to 2015, mortality for heart disease dropped by 11 percent while Alzheimer's-related deaths increased

## 123%.



## A growing body of evidence suggests that the physical changes in the brain that may lead to Alzheimer's disease begin during midlife

and that it takes decades for the damage to become extensive enough to show symptoms. This gap in time presents an important window of opportunity for treatment and prevention strategies.

Research shows that elevated midlife lipid levels are associated with cognitive decline

## 20 years later.



Alcohol use disorders contribute significantly to the burden of dementia.

## Nearly 40%

of early onset dementia can be attributed to alcohol use disorders, and people with alcohol use disorders have more than three times the risk of dementia than those without, according to a recent study.

For more facts on Alzheimer's disease, go to [www.alz.org/facts](http://www.alz.org/facts).

## PHYSICIAN PROFILE

## Get to Know

## Franco Michael Campanella, DO



*Neurologist Franco Michael Campanella, DO, believes our lifestyle choices have great potential to prevent future health problems. But realistically, it's a balance, he says, between living a life you're happy with in the present and preserving your health for the future.*

*Dr. Campanella developed that perspective after nearly 20 years practicing medicine. He graduated medical school from Midwestern University in 1997 and went on to complete his residency at the University of Illinois Medical Center and Clinics. Here he shares his thoughts on brain health and what matters to him.*

### What made you decide to go into neurology?

I had a really great high school teacher who got me hooked on science. Then in college, I took a neuroscience course at Loyola University where I realized that it all ends in the brain. It's the most complex thing in the body.

People would ask why I wanted to specialize in neurology, saying there's only so much I could do for patients because there aren't enough "knowns". But that's exactly what I like about it. I want to be in a field where there is still a lot to learn. And, we are learning a lot about brain health and Alzheimer's risk.

### What are you doing in your own life to protect your brain health?

I'm on the Mediterranean diet myself. I had been snoring at night and was worried I'd have to do a sleep study, but I've lost weight and the snoring went away.

As a Sicilian American, when I took the Mediterranean diet quiz, I thought I'd do well, but I didn't. So a few months ago, I bought cookbooks and have been cooking and eating more at home. I'll just open the cookbook and find a recipe that I can easily cook on a busy weekday evening. One of my favorites was a chicken with walnuts, broth, onions, and garlic, and more recently a fava bean salad.

### What's something you wish your patients knew about you?

I believe that the seat of our soul is in our brain. Of course we want to preserve that and preserve our quality of life, but I also try to enjoy the ride. It's a balance. I say this because I watched my father's quality of life in retirement go down quickly. He got really sick and died within two years. That highlighted for me that nothing is certain or guaranteed and that we should enjoy the present as part of preparing for the future, which is a bonus. Genetic testing lets us make informed choices to focus more on disease prevention. And preventing problems to begin with is more important than anything. But don't forget to enjoy your life along the way.