

A NEWSLETTER FROM THE DALE AND DEBORAH SMITH
CENTER FOR ALZHEIMER'S RESEARCH AND TREATMENT



MIND MATTERS



SIU MEDICINE

DALE & DEBORAH SMITH CENTER
FOR ALZHEIMER'S RESEARCH
& TREATMENT

INSIDE

- ◆ Caregiver finds support, peace through Minds in Motion
- ◆ Stepping Up balances dance and exercise for winning combo
- ◆ Meet Jennifer Arnold, MD
- ◆ Upcoming events



From the Director

Welcome to the debut issue of the Dale and Deborah Smith Center for Alzheimer's Research and Treatment newsletter — Mind Matters!

We want to provide you a snapshot of the world of Alzheimer's right here in our community. In this issue, you'll meet some wonderful people – a caregiver who found peace once she realized she didn't have to go it alone, a program leader using innovative techniques to improve the quality of life for those with memory loss, as well as one of the newest doctors on the Smith Alzheimer's Center team. We hope you will find this newsletter both informative and enjoyable.



Erin Hascup, PhD

We know this disease needs a full community effort to stand up against it. From the clinical care provided at the Smith Alzheimer's Center, to our Beyond the Medical Center programs helping those with memory loss and their caregivers, to researching ways to slow the progression of the disease, we're taking Alzheimer's and dementia head on.

Thank you for reading and for your support!



Coming soon!

BRAIN AGING CONFERENCE

The Smith Alzheimer's Center is happy to announce the return of the Brain Aging Conference in 2022, where community members can learn more about memory loss and how to care for loved ones with early-stage memory loss.

Topics will include, but not limited to:

- Differences between normal brain aging and dementia
- Diet recommendations to help maintain a healthy lifestyle
- Legal planning guidance for families
- The role and importance of brain exercises
- Pharmacological treatments, both FDA and over the counter

More information will be available online at siumed.org/alz, in the coming weeks. To learn more, email care@siumed.edu

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On the cover

Those with memory loss and their caregivers meet at Art Express, a SIU Medicine program that collaborates with the University of Illinois' Human Development Counseling Program and Hope Presbyterian Church.

EDITOR IN CHIEF **AREN DOW**
PHOTOGRAPHER **BEN ROMANG**
EDITORS **ERIN HASCUP, SARAH KINKADE, STEPHANIE CULLEN**



Meet Jennifer Arnold, MD

What brought you to SIU Medicine?

I was born in Springfield and spent all of my childhood here, leaving only to go to college, then medical and graduate school.

I always knew I wanted to return home eventually. I am fortunate that we have an excellent academic medical program as well as an outstanding hospital system in my hometown. It was an easy decision to move back home when I finished my training to establish my career.

Why did you choose neurology as a focus?

I was always fascinated with infectious disease stories when I was young, and this led me to start research with Dr. Linda Toth here at SIU, studying the effects of infection on sleep. I became enraptured with the neurology of sleep and never looked back. I turned my focus to the brain when I started graduate school at the University of Illinois.

My graduate work in this area led to ongoing fascination with cognition and consciousness, and when it came time to choose a focus in medical school, it was easy for me to choose the brain. I haven't regretted this decision and each time I see a patient with an unusual cognitive symptom it reminds me about the complexity of our minds and how they function.

EDUCATION/TRAINING

BS in Biology
Southeast Missouri State

MD
University of Illinois

PhD Molecular &
Integrative Physiology
University of Illinois

Neurology Residency
University of Michigan

Neurodegenerative
Diseases Fellowship
University of Michigan

JOINED SIU MEDICINE

2021

healthy eating, healthy brain

We all know the importance of eating right.
But what is right?

Here are some diet recommendations to help
maintain a healthy brain.

Green leafy vegetables

Other vegetables

Nuts & Berries

Whole grains

Fish & Poultry

Olive oil

Wine (1 glass/day)

Eat more

Eat less

Red meats

Butter

Stick margarine

Cheese

Pastries & Sweets

Fried or fast food

Caring for the Care

Minds in Motion provides support for more than those with memory loss

For a long time – four years, in fact – Nancy Seefeldt tried to manage on her own.

She and her husband Darrell moved back to central Illinois from Colorado to take care of Darrell's brother, Richard, who had cancer. But in the process of taking care of one person, Nancy realized she was having to care for her husband as well.

For Nancy, a teacher in her previous life, helping people came naturally. This, however, went beyond her expertise.

"He wanted to do certain things that we had never done before," Nancy said. "He was stubborn about it – I thought it was just marital issues. It wasn't. It was his memory going away.

"I went into deep depression. I didn't know how to handle any of this."

Finally, it hit a breaking point. During one of Nancy's check-ups with her family physician, Darrell chewed out the physician for not finding out some issues sooner. Recognizing signs of memory loss, the physician gave them a referral to see Tom Ala, MD, at SIU Medicine, where Darrell was diagnosed with Alzheimer's. For Nancy, that first visit was just as important for her well-being.

"That was the beginning of my recovery."

Armed with better information about Alzheimer's, Nancy began exploring what else was out there in



Nancy Seefeldt volunteers at Minds in Motion, even after her husband's passing. She knows the relief caregivers can feel when a group works together to care for others.

the world surrounding the disease. She picked through listings, looking for support groups and developed a new network of friends.

A friend invited her to help organize a program, Minds in Motion, putting her teaching skills to use. But as she learned more about the program, Nancy realized she could bring Darrell as well. It took some convincing at first.

"He didn't want to go any place because it had 'those people,' not

realizing he was one of 'those people,' too. He was not a real good participant," Nancy said with a laugh, "but he saw people doing things... it was those multi-tasking things that I think really helped him."

For four hours, Minds in Motion uses art, exercise, music, brain games and more with the goal to improve or maintain mental, physical and emotional well-being. It is a free, evidence-based program designed specifically for persons experiencing memory loss or dementia. Thanks to

givers



“
*That was the
beginning of my
recovery.*

— Nancy Seefeldt, on meeting Dr. Ala

funding from partners like the King's Daughters Organization Fund at the Community Foundation, Minds in Motion happens twice a month.

Nancy saw the benefits first-hand. Even with Darrell's reluctance at times to fully join in, she saw his scores increase when a visit to the Memory and Aging Clinic followed a Minds in Motion class. While the activities are designed to strengthen stability, memory and other issues, being around others in similar situations was invaluable as well.

"The camaraderie was worth it," she said. "It was a relief to know when I came here at 10 o'clock and I didn't leave until 2 o'clock, I didn't have to worry about what he'd get into."

Darrell passed in 2019 at the age of 74. But Nancy still makes Minds in Motion a priority in her volunteer efforts. From helping participants weave art projects together or sharing experiences with other caregivers, Nancy certainly knows the benefits of the program.

And she doesn't want anyone else to travel that journey on their own.

"Here, there were so many people willing to help and we were all on the same page. And I guess at the time I didn't realize how peaceful it made me feel."

Looking Beyond the Center



Beyond the Medical Center programs give caregivers a chance to recharge and develop valuable relationships with others also caring for loved ones, all while those with memory loss have new creative experiences.



Mark your calendar

TUESDAY

Minds in Motion - First and third Tuesday of the month

Use all five senses to improve or maintain mental, physical and emotional well-being

FRIDAY

Stepping Up - Every week

Fitness and fun with music and movement, focusing on strength, balance, endurance and flexibility

WEDNESDAY

Art Express - Every week

Express creativity without needing memory or communication skills

ON YOUR TIME

Music & Memory

Stimulate deep emotional recall through music

To register for a program, or to learn more information:



217.545.7204



care@siumed.edu



siumed.org/alzheimers-center-programs



Eve Fischberg, left, has led Stepping Up for five years. Using music, exercise and dance, the program focuses on strength and balance.

Eve Fischberg is the kind of person you think of wearing a permanent smile.

Leading the Stepping Up class, Eve's positive rhythm and energy pours out. Even so, an extra hint shines through when announcing the exercise's next accompaniment: "And Your Bird Can Sing" from her favorite Beatles album, "Revolver." And dancing along with Paul and George's guitars harmonizing the opening riff, who wouldn't smile?

Since 2017, Eve has led Stepping Up, a program to help those with memory loss and their care partners develop better balance. Now-retired from SIU Medicine, Maggie Schaver was also instrumental in developing the program.

An occupational therapist by trade, Eve's taken the Otago Exercise Program, an evidence-based falls risk reduction program for individuals in their homes and modified it to be offered to groups in community-based settings, and infused dance.

"Because it's fun — I love to dance. Whenever I have an opportunity to throw it in, I'm going to use it,"



Eve Fischberg

Eve said. "And also because it's evidence-based. Studies have indicated that participation in dance may be more beneficial for improving balance than a standard exercise class."

That's Eve's theme. She's going to take what works and make it enjoyable. Sure, turning on "Penny Lane" and "Here Comes the Sun" makes you feel good and think about the old days, but that's the point. "Musical memory, it taps into emotional memory. That's retained a whole lot better — it makes them more engaged."

Lateral movements are emphasized because of the propensity of lateral falls, "power moves" are included to increase strength in muscles that

weaken with age, and weights are personalized for each participant.

When developing the program, Eve was intentional when including how caregivers could participate, too. But she didn't fully anticipate improvements in their own balance, let alone the camaraderie: "It's the fastest-acting antidepressant."

The other eye-opener? Seeing how those with Alzheimer's responded over time.

"We're dealing with people who have neurodegenerative issues and the evidence is, every six months their balance is going to get worse," she said.

"But they were getting better. And I have the numbers to prove it. That's cool. Now, this is not designed as a study. I didn't have a control group — it's not an experiment. But I could look at those numbers and say, these people are supposed to get worse and they're getting better."

Good day sunshine, indeed.

Diving into

Research



A pharmacology and neuroscience student at SIU School of Medicine, Jesse Britz, along with Shelley Tischkau, PhD, and the Smith Alzheimer's Center Hascup Labs, recently researched the link between Alzheimer's and circadian rhythm (the body's 24-hour internal clock). Britz, who is from Divernon, earned his PhD this past December.



Jesse Britz

Tell us about your recent research.

The whole focus of the project started because sleep/wake cycles are heavily disrupted in Alzheimer's. For a long time it's been looked at as a symptom – sundowning is a term that is normally used.

People in late-stage Alzheimer's disease will get up in the middle of the night, sometimes get aggressive, agitated. Their sleep patterns are all messed up. For a long time, that's been known, but some other groups have looked at disruptions playing a role before Alzheimer's is diagnosed. We wanted to see how these two potentially play into one another.

Why did you look at the difference between males and females?

Females are two-thirds more likely to develop Alzheimer's disease, so there's definitely something going on there. From a circadian standpoint, we found sex differences that had never really been seen before. Actually, there's really only been a push in the last couple of years to use female animals in studies. Previously, they used all males.

But from the start, we were going to compare the two.

How was the project designed?

The whole project is designed to simulate a chronic jetlag condition. The easiest way to describe it is if I worked night shift five days of the week and tried to rebound to an 8-to-5 schedule on the weekends, then go back to night shift. That's the easiest way to think about our lighting paradigm. And we wanted that to be chronic because someone who works night shift does it for 25 years. Small interruptions are not going to cause a drastic effect.

The irony is, you have to collect these samples at all different times of the day. I spent a lot of time at 2 a.m. and 4 a.m. in the lab to make sure we had consistent data.

What did you find?

In short, the major finding from this entire project is that our male Alzheimer's animals were highly susceptible to the effects of chronic circadian disruption and it exacerbated the Alzheimer's phenotype, whereas the females seemed more protected from it.

The circadian system has been linked to so many more things than Alzheimer's – cancer, metabolic syndrome (which can lead to heart disease, stroke and diabetes). I think the takeaway point is that the circadian system is fragile and chronic disruption is going to have an effect on your health.

Want to read for yourself?

You can read the full manuscript online at the National Library of Medicine.



Scan the QR code or search "Hascup Britz" at pubmed.gov to learn more.

**THE
COST
OF
CARE**

**380,000
caregivers
in Illinois**

59%
of caregivers
report
emotional
stress

\$8.5B

**Value of unpaid
care hours by
Illinois caregivers.**

Yes, billion with a B.

2021 Alzheimer's Disease Facts and Figures

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SIU Medicine
Dale and Deborah Smith Center for
Alzheimer's Research and Treatment
751 N. Rutledge St.
Springfield, IL 62702



Help us take Alzheimer's head on.

From evidence-based programs supporting patients and their families to ongoing research dedicated to finding ways to slow progression of the disease to training the next generation of dementia care specialists, the Dale and Deborah Smith Center for Alzheimer's Research and Treatment has big ideas, big hearts and big goals.

Your gift impacts our communities and supports our vision of better health for all. Scan the QR code to the right, or visit forwardfunder.siumed.edu/care

Thank you.



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