

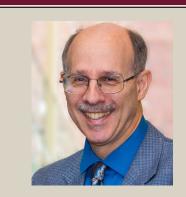
# Older Adults and COVID: Still a risk, but steps can be taken to guard health

When vaccines first became available to the public for COVID prevention, I had hopes that such rapid progress with vaccines might lead to herd immunity and an end to the pandemic, though I advised caution: <a href="https://isl.fsu.edu/article/youve-gotten-vaccine-can-life-now-return-normal">https://isl.fsu.edu/article/youve-gotten-vaccine-can-life-now-return-normal</a>. As it turns out, advising caution was wise. A recent article showed that there is a risk of severe consequences for aging adults from COVID-19, particularly from the now widespread Omicron variant: <a href="https://www.nytimes.com/2022/05/31/health/omicron-deaths-age-65-elderly.html">https://www.nytimes.com/2022/05/31/health/omicron-deaths-age-65-elderly.html</a>.

The recent winter wave of Omicron hit those age 65+ hard with a large increase in deaths compared to other age groups. Why did this happen? Part of the reason is the more infectious nature of Omicron coupled with a weaker immune response as people age. Many seniors have still not had their first vaccine shot, second vaccine shot, booster, or second booster shot, despite being advised to do so. For those who never received a vaccine, the death rate appears to be 156 per 100,000 seniors during the winter Omicron wave. For those vaccinated, the death rate drops strikingly to 24 per 100,000. For those who had a booster, it was 7 per 100,000.

Death is of course the most attention-grabbing outcome. However, even for those who recover, there are potentially severe consequences post-COVID. Organ systems can be invaded by the virus, resulting in cardiovascular damage, lung damage, kidney damage, musculoskeletal damage, and neurological damage, including damage to cognitive health: <a href="https://isl.fsu.edu/article/long-term-effects-covid-19-infection-may-shape-cognitive-health-aging-society">https://isl.fsu.edu/article/long-term-effects-covid-19-infection-may-shape-cognitive-health-aging-society</a>.

#### FROM THE DIRECTOR



Neil Charness, Ph.D., is the William G. Chase Professor of Psychology and Distinquished Research Professor at Florida State University and Director of the Institute for Successful Longevity.

Recently released statistics by Centers for Disease Control indicate that for those less than age 65, the chance of post-COVID injury is about one in five. For those age 65+ it is about one in four: <a href="https://www.cdc.gov/mmwr/volumes/71/wr/mm7121e1">https://www.cdc.gov/mmwr/volumes/71/wr/mm7121e1</a>. htm.

What can be done? People should avail themselves of vaccinations and boosters as soon as possible. Fortunately, if you do contract the virus, there are now effective treatments that didn't exist when the first vaccines were rolled out. The Pfizer anti-viral drug, Paxlovid, is recommended for older adults who contract COVID-19.

Paxlovid can significantly reduce the impact of the virus, such as becoming hospitalized and dying. Although the government is trying to increase the availability of Paxlovid, it is still not that easy to get, as I found out when trying to pick up a prescription for my wife, who recently fell ill despite being vaccinated, boosted, and boosted a second time. Instead of Paxlovid being at my local pharmacy, I had

to travel to a more distant one. Convenient access is important because the drug is only effective if given early in the disease, usually within five days of infection.

The problem is that many people do not get symptoms until about two or three days after being infected. Then there can be a

delay before testing positive and arranging a telehealth visit with your physician to be given the prescription. Our physician's office discourages in-person visits when COVID-positive, so prefers to make a prescription decision following a telehealth session. There are probably many people who do not have access to rapid Antigen home tests, despite their being free to

order: <a href="https://www.covid.gov/tests">https://www.covid.gov/tests</a>.

We were fortunate to have test kits handy at home, and even more fortunate that our home was large enough for my wife to isolate upstairs while I stayed on the main floor, managing to avoid infection. She recovered within a week or so.

One should be wary that all is well even after treatment with Paxlovid, recovery, and a negative test. There is evidence that some people can rebound following treatment with Paxlovid, somewhere around day



10 and that they can infect those around them, leading the CDC to offer new guidelines for isolation and testing following a course of Paxlovid: <a href="https://emergency.cdc.gov/han/2022/pdf/CDC">https://emergency.cdc.gov/han/2022/pdf/CDC</a> HAN 467.pdf. At this point we don't know the prevalence of rebound, as it was estimated as about 2% (equally in Paxlovid and placebo groups) by Pfizer in their original clinical trial. It may be higher than that, so if you or someone you know are treated with Paxlovid it would be good to do an antigen test (or better yet, a PCR test) around day 10 after initial diagnosis.

We have come a long way since the start of the pandemic, with effective vaccines and effective treatments. We need to encourage friends, family, neighbors to get vaccinated, particularly at-risk older adults. If despite best efforts to avoid infection, people become infected, they should try to get an effective treatment as soon as possible.

### You can volunteer to help with ISL's research

FSU's Institute for Successful Longevity needs research volunteers to help us achieve our mission of improving health and well-being for Florida's aging population.

You can be paid to advance the science of successful longevity, helping your friends and family achieve longer, more productive, and enjoyable lives. You will be able to choose what studies you participate in.

To volunteer, visit <a href="https://www.isl.fsu.edu/volunteer">https://www.isl.fsu.edu/volunteer</a>, or call 850-644-8571 or send an email message to <a href="mailto:isl@fsu.edu">isl@fsu.edu</a>.



The Institute for Successful Longevity conducts research into how to live longer, stay active and be fully engaged in life. The institute takes a multidisciplinary approach to better explore the complexities of life as an older individual. Visit our web site at <a href="https://isl.fsu.edu/">https://isl.fsu.edu/</a>.



# Dr. Paul Katz, chair of Geriatrics, talks on the state of elder care

The Institute for Successful Longevity recently spoke with Paul Katz, M.D., chair of the Department of Geriatrics in FSU's College of Medicine, about elder care today. Here is an edited version of that conversation.

#### What is the status of elder care in the United States? Are we in good shape?

I think that's a complex question. I think we could be doing a lot better on a number of fronts.

Geriatrics is a relatively new specialty in this country. When you really go back to the origins of geriatrics in the United States, the emphasis was never on training enough physicians in particular — and you could expand that today to other medical providers, such as nurse practitioners and physician assistants — the emphasis was never on creating this cadre of medical providers that would care for all older adults, because that would be impossible. So, it's always been to train enough people who could take leadership positions within healthcare, in academics in particular, who would create curriculum and training for all medical providers, all physicians, so they could take adequate care of older adults.

That means not only leading research efforts to find out how to better take care of older adults but also clinically. And I think that's all we've done. When you ask what's the status of elder care in this country, we have never been able to attract enough clinicians into geriatrics per se.

For example, on average only about 50 percent of all the geriatric fellowships are filled every year, and the fellowships now are only a year, where they used to be two years. Many of us would argue that we really do need two years of post-residency training to develop the leaders in the field. So, there are many constraints. The workforce estimates are that we're falling further and further behind in terms of geriatrician production. I think it's a particular problem in Florida, where we already have a very large population of older adults.

You know, many non-geriatricians provide excellent care to their patients. On the other hand, there are a lot of physicians who see a large number of older adults and who may even claim that they are geriatricians but their care, I think, in so many respects, is suboptimal. So, it's a national problem.

### You say we are falling behind. Is that because the population is growing faster than physicians are being educated, or is it that students in medical school are choosing other paths?

It's more, I think, the latter. Of course, the population is growing very rapidly, the older population, and the ability to train, to produce enough geriatricians has always been low and now it's just falling behind, relatively speaking. But is exactly what you said — it's not as attractive a field to many young physicians as it should be. There have been reports in the literature that say geriatrics as a specialty field is one of the most satisfying. There are also counterarguments that doing a geriatrics fellowship is not cost-effective when you look at career earnings, so there's a discrepancy. Most of us who have gone into geriatrics and, I must say, into other specialties like pediatrics don't do it for the money. We do it because it's what we enjoy and for the needs that are out there.

### In the last, say, 10 years we've seen more and more residential communities pop up — they're all over the place now. Is all this happening in the right way?

Another great question. You're describing the burgeoning of assisted living and other residential-care models, a lot of the

independent living with supports. I think a lot of it is purely market-driven. There's a sense that there may have been overbuilding, but the market will correct that, I presume. I work in several assisted-livings that do provide more of a home-like atmosphere. Many would argue that people are living longer at these sites of care and they're getting sicker, with higher needs, and that many of these particular institutions are not ready to provide the level of medical care needed. So that's another caveat when you talk about elder care.

I think the big issue is accessibility. There is a large proportion of older adults who can't afford to go into assisted living or into fancy residential apartment buildings with supports. They just can't afford it. Medicaid is limited throughout the country, particularly in the state of Florida, and the number of Medicaid beds, for example, for assisted living is relatively small. So, there's a segment of the population that can do very well in an assisted-living type of care setting, but because they can't afford it and because they often may lack social supports to live at home independently, they're forced into a much higher level of care they don't need, like a nursing home.

Our care system has always been a challenge. It's fragmented and it's expensive, particularly for elder care. So, how do we get out of something like this? Some would argue that long-term care insurance is something you should purchase, but again, most people can't afford it. There are efforts nationally to create a system that would give older adults some resources, building on



Paul Katz, M.D., is chair of the Department of Geriatrics in the FSU College of Medicine.

people can't afford it. There are efforts nationally to create a system that would give older adults some resources, building on our current Medicare, much like a long-term care insurance policy, to get people the resources they need. But in the current political environment I don't see that happening for years to come.

So, access is a clearly an issue. Another might be training. Anyone who has spent time with family members in a residential home or assisted living can't leave without having doubts about the level of training provided to the people who work there.

The workforce development, the training at all levels, particularly in nursing, is inconsistent. There are many schools of medicine, schools of nursing, social work, etc., that don't require substantive experience within long-term care settings, so they're not assuring that when you graduate you're going to have access to role models who are doing a good job. That would allow you to have the competencies you need to take care of older adults. I know the National Academy of Sciences has presented the notion that all health-care professionals should be required to have basic competencies for older adults. How

do you measure those competencies, how do you instill those competencies within a training curriculum? That's what we've been dealing with for years. The bottom line is there's an inconsistent pattern. It is kind of the luck of the draw who you get in a nursing home or assisted living. Most people are trying to do the best they can but if they don't have the experience or the training or the resources, then it's very hard.

This also brings up the issue of quality of care. How do you measure quality of care at these various settings? In the nursing homes we rely on a lot of publicly reported quality measures that reflect more system-level issues. They certainly reflect how much staff you have, how well they're trained, what their competency level is. They also reflect what the resources are in a particular facility, etc. But in areas like assisted living or other congregate-living settings we don't have national quality measures, so if a family member asks where should I go, a lot of it is just, well, "I know someone who knows someone who used to live there and that's a good place" or "I went to look at a place and it smelled of urine so I'm not going to go there." It's kind of the smell test. It's all over the board. We need more consistency on a national level to help guide consumers and presumably to set some standards for the staff.

In his State of the Union Address this year President Biden mentioned some of these issues, and there's been talk about setting some of these standards nationally in nursing homes, in particular staffing ratios. We know that on a general level the more nursing staff you have and the better trained they are that the quality of care generally goes up.

But where are you going to find the staff? Many people liken it to a perfect storm. We have issues with training, we have issues with recruitment and retention, and COVID just exacerbated what we knew was around the corner anyway.

#### What is your 20-year outlook for Florida?

Since I'm in that cohort now I'm like everyone else, I'm worried. I think there are solutions. Unfortunately, in this country we almost have to get to the breaking point before a solution is found; that's the nature of our political system. The gap between the haves and have-nots is widening in terms of the older population. If you have resources, if you have money in your retirement in Florida, you'll find everything you need — it's a great place to retire. But if you don't, you can't really rely on government services to the extent that you'll need to and you're going to fall through the cracks, unfortunately. Those people are going to have suboptimal care. We definitely need a change in financing that will give us some minimal level of support.

"The gap between the haves and havenots is widening in terms of the older population."

When I started my training in geriatrics in the early '80s so much of what we saw then we see now. I was thinking, "Another 20-30 years this will all be taken care of. We will have found ways to address these issues and I'll be out of the job." Of course, it's worse now than when I started. The good news is people have found ways and innovative programs and innovative approaches to caring for a lot of the ills that older adults suffer, everything from behavioral disorders and dementia to combating frailty to a greater emphasis on prevention and exercise. We made a lot of great strides in geriatrics. Yet life expectancy actually decreased last year — that's a red flag. Our health system is just inconsistent, and as you get older the effects of that inconsistency — lack of accessibility, etc. — just becomes more pronounced and more severe.

#### Do you see technology providing help for older adults?

I think technology could be a huge help. I don't think it's going to be the panacea for all of these ills, for all these challenges, but it certainly can help. If it's enough to keep an individual at home safely even for another year that could be a big issue, not only in quality of care and quality of life for that individual but also in terms of costs on a national level. So, yes, I think technology can help. Cost is, again, an issue. Getting it to the right people on a large scale is going to be a challenge.

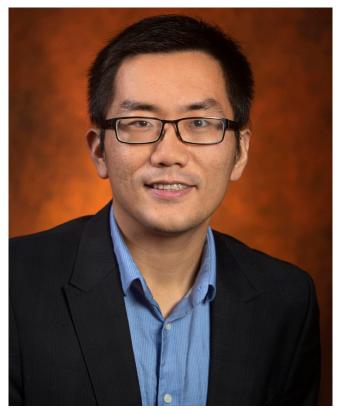
# Zhe He leads winning team in FSU's Collaborative Collision competition

A project by Faculty Affiliates of the Institute for Successful Longevity and other researchers using artificial intelligence to aid older adults with Alzheimer's disease earned the top prize at a Florida State University competition designed to develop interdisciplinary research teams tackling complex issues.

The project, which unites faculty and staff members from the College of Communication and Information, College of Business, College of Fine Arts, College of Medicine and FSU Facilities, will receive \$50,000 in internal funding from the FSU Office of Research. The team is developing a project called DeepCare, which uses AI to improve social connectedness and emotional wellbeing among individuals with Alzheimer's disease and dementia. Alzheimer's is the sixth-leading cause of death for adults in the United States.

You can watch the video for the DeepCare project here: <a href="https://isl.fsu.edu/article/zhe-he-leads-winning-team-fsus-collaborative-collision-competition">https://isl.fsu.edu/article/zhe-he-leads-winning-team-fsus-collaborative-collision-competition</a>.

"Traditional approaches to tackling this problem are usually static, without too much customization for a particular population or toward a particular person," said ISL Faculty Affiliate Zhe He, associate professor in the School of Information and the team's principal investigator. "We think artificial intelligence is going to be a great tool to help us customize our interventions based on personal preferences and characteristics. We can also tailor our treatments based on the behavior of individuals over time."



Zhe He, Ph.D., is Associate Professor in the School of Information and a Faculty Affiliate of the Institute for Successful Longevity.

In addition to He, the DeepCare research team includes ISL Faculty Affiliates Jonathan Adams of the College of Communication and Information and Patricia Born of the College of Business. Other members are Heidi Kinsell of the

College of Medicine, Keith Roberson of the College and Marcela Castaño of FSU Facilities.

The team was one of five that competed in Collaborative Collision: Community+, an initiative that united researchers from around the FSU campus and local organizations to explore projects focused on community. The teams pitched their research to a panel of faculty and staff to receive up to \$50,000 to support their work.

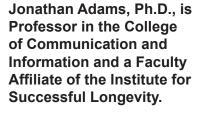
"The research supported by this program is fascinating because of its interdisciplinary nature," said Interim
Vice President for Research Mark Riley. "Society has problems that can't be solved by a single academic discipline. That's where a university such as Florida State can make a



Patricia Born, Ph.D., is the Payne H. & Charlotte Hodges Midyette Eminent Scholar in Risk Management & Insurance in the College of Business and a Faculty Affiliate of the Institute for Successful Longevity. major contribution, because of our ability to bring together researchers from a variety of fields to look for solutions to these complex problems."

The community theme was a natural fit for an initiative focused on interdisciplinary questions. Many FSU faculty are engaged in participatory research programs, in which members of the local community are part of the research process and are empowered to solve problems on their own. Others study communities in all sorts of forms — those made up of people, animals, businesses and other entities that make up complex interdependent systems.

"Whether we're talking about community development, community performance, community engagement, community health, community resilience — these are all community plus something else, and without



that something else, you don't quite get the full picture," said Mike Mitchell, assistant director for research strategy and impact in the Office of Research Development. "So <u>Collaborative Collision: Community+</u> welcomed anyone and everyone whose research, scholarship or creative pursuits involved community, however they chose to define it."

### Jing Wang, Dean of Nursing and ISL Faculty Affiliate, named to Robert Wood Johnson Foundation board

Jing Wang, dean of the Florida State University College of Nursing and a Faculty Affiliate of the Institute for Successful Longevity, has been named to the board of trustees of the Robert Wood Johnson Foundation.

Wang is the first administrator from an institution within the State University System of Florida to serve on the board in at least 30 years.

Founded in 1972, Robert Wood Johnson Foundation touts itself as the nation's largest philanthropy dedicated solely to health. The foundation's Board of Trustees comprises leaders from a variety of sectors, including academia, nonprofits, business, government and medicine.

Wang and one other new trustee, Azita Emami of the University of Washington School of Nursing, will work on the foundation's objective to "identify, understand, confront, and remove structural barriers to health and well-being, including racism, powerlessness, discrimination, and their consequences."

Kathryn S. Fuller, chair of the board of trustees, hailed the two new board members for "their understanding of the health care, community and digital spaces we need to consider to improve health will inform and enrich our work to foster a Culture of Health for everyone in America."



Jing Wang, Ph.D., is dean of the College of Nursing and a Faculty Affiliate of the Institute for Successful Longevity.

As a RWJF Nurse Faculty Scholar in 2013, Wang credits the RWJF as an instrumental player in her career and leadership development. Last year, the National Academy of Medicine (NAM) named her among 10 Emerging Leaders in Health and Medicine Scholars.

"It's truly an honor and privilege to serve RWJF as a trustee, and I look forward to working with RWJF in this pivotal time to advance a Culture of Health for all, where every individual in America has a fair and just opportunity for health and wellbeing," Wang said.

## Yan Li wins \$1.8-million NIH grant to develop new treatments for stroke patients

The National Institutes of Health is funding a \$1.8-million project led by Yan Li, a Faculty Affiliate of the Institute for Successful Longevity and a researcher at the FAMU-FSU College of Engineering, that will use artificially grown, simplified mini-organs to create medicine that targets brain cells damaged by stroke.

The research team will use stem cells to create miniature organs that resemble human brains. From those so-called brain organoids, they will harvest particles that are naturally released by cells and engineer them to act as medicine where it's needed in the brain of a patient.

They plan to use stem cells that can become any type of cell in the body and induce them to become various types of neural cells, the building blocks of a brain organoid. Their hypothesis is that the particles collected through that method will carry brain-specific molecules, making them a more effective therapy than particles that come from other sources.

"Because these particles are coming from cells that mimic the human brain, we think that what they secrete will be more beneficial for treating the damaged brains of stroke patients," said Li, Associate Professor of Chemical and Biomedical Engineering Yan Li.

The collected particles released by cells are used in various treatments. Those particles — known as extracellular vesicles — can help heal damaged cells. That's important for brain cells affected by stroke because those damaged cells are toxic to neurons, the nerve cells within a brain that use electric and chemical signals to transmit information.



Yan Li is Associate Professor of Chemical and Biomedical Engineering at the FAMU-FSU College of Engineering and a Faculty Affiliate of the Institute for Successful Longevityand a Faculty Affiliate of the Institute for Successful Longevity.

About 795,000 people suffer a stroke in the United States each year, making it a leading cause of death and disability in the country, according to the Centers for Disease Control. Most strokes occur when the blood supply to the brain is blocked, which is the type of stroke the researchers will focus on in this work.

Li will collaborate with Professor of Chemical and Biomedical Engineering Samuel Grant, Assistant Professor of Chemical and Biomedical Engineering Tristan Driscoll, FSU College of Medicine Professor Yi Zhou and College of Medicine researcher Li Sun on the five-year project.

### Lynn Panton honored by American College of Sports Medicine

Lynn Panton, Ph.D., Professor in the College of Health and Human Sciences and a Faculty Affiliate of the Institute for Successful Longevity, has been honored with the 2022 Service Award from the Southeast Regional Chapter of the American College of Sports Medicine.

Dr. Panton also was elected by her peers to represent the Southeast at American College of Sports Medicine meetings and events.

The American College of Sports Medicine was founded in 1954 by a small group of physical educators and physicians who recognized that health problems were associated with certain lifestyle choices, especially smoking and lack of exercise. Since then, members from all professional backgrounds have applied their knowledge, training and dedication in sports medicine and exercise science to promote healthier lifestyles for people around the globe.



ISL Faculty Affiliate Lynn Panton, Ph.D.

## Ravinder Nagpal awarded grant for Alzheimer's research from Infectious Diseases Society of America

Dr. Ravinder Nagpal, Assistant Professor in the Department of Nutrition & Integrative Physiology and a Faculty Affiliate of the Institute for Successful Longevity, has been awarded an early-career investigator grant by the Infectious Diseases Society of America Foundation's to explore a potential link between infectious diseases and the cause of Alzheimer's disease.

The \$30,000 award will fund a one-year exploratory project to examine the implication of microbial pathogenesis in neuropathogenesis and investigate how intestinal colonization and infection by specific pathogenic bacteria may trigger or worsen Alzheimer's pathology via the gut-brain axis. Dr. Nagpal aims to examine if there is a role for specific opportunistic gut pathogens, such as Proteobacteria, Enterobacteria, Klebsiella, or Candida, in Alzheimer's neuropathogenesis, and if so, then what mechanisms are involved therein. If found true, these findings will provide a new line of evidence to prove his hypothesis that Alzheimer's disease does have a link to infectious diseases or a microbial mechanism, thereby paving the way for further larger studies to address Alzheimer's from an infectious disease perspective.

Emerging evidence suggests Alzheimer's disease may have a link to infectious diseases or a microbial mechanism, but limited funding in the field has left this potential link largely unexplored. The Infectious Diseases Society of America Foundation's 2021 Microbial Pathogenesis in Alzheimer's Disease Initiative aims to bridge this gap by promoting novel research into a potential missing microbial link to Alzheimer's disease, which could provide clues to a cure. This year, the Foundation received 78 exceptional projects from all over the world, of which 11 most outstanding ideas were selected by a convened review panel comprised of 18 experts from across the country to receive grants ranging from \$30,000 for early-career investigators to \$250,000 for established investigators to initiate or expand their research.



Ravinder Nagpal,
Ph.D., is Assistant
Professor in the
Department of
Nutrition & Integrative
Physiology and a
Faculty Affiliate of the
Institute for Successful
Longevity,

"It is an absolute pleasure and honor receiving this award from the prestigious IDSA," said Nagpal. "I am incredibly grateful to the IDSA for believing in our science. We are excited about this important and timely project that aims to shed new light on the intricated connection of gut microbial pathogenesis with neuropathogenesis thereby paving way for novel targets to prevent/ameliorate Alzheimer's disease."

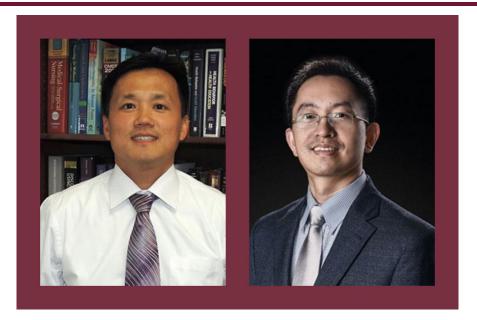
The grant supports various levels of researchers across all disciplines and spans the breadth of the microbial world. Projects span the breadth of the microbial world and may focus on bacteria, fungi, parasites, viruses and microbial synergy, among other possibilities. Funding for the Microbial Pathogenesis in Alzheimer's Disease Grant program is supported through a partnership with the Alzheimer's Germ Quest and The Benter Foundation. For more information about the grant and its awardees, visit <a href="https://idsafoundation.org/ALZ-research-grant/">https://idsafoundation.org/ALZ-research-grant/</a>.

### In the ISL Blog: Electric vehicles and people with disabilities

In the ISL Blog, read JR Harding's look at electric vehicles, Florida's future tech and how designers and engineers are leaving behind people with disabilities.

Harding, Ed.D., Teaching Faculty II in the College of Business and a Faculty Affiliate of the Institute for Sucessful Longevity, follows up on a *Florida Trend* article on the design and marketing of electric vehicles that he found both illuminating and scary. Harding is concerned that Florida and the nation are moving toward one EV-friendly system for those without disabilities and another system entirely for persons with disabilities, a dichotomy that that would further advance existing discrimination. Read more at <a href="https://isl.fsu.edu/article/electric-vehicles-revisited-floridas-future-tech-and-people-disabilities">https://isl.fsu.edu/article/electric-vehicles-revisited-floridas-future-tech-and-people-disabilities</a>.

Hyochol "Brian" Ahn, left, a Faculty Affiliate of the Institute for Successful Longevity, is the Founding Director of the new center in the College of Nursing; Hongyu Miao is the center's Associate Director.



## IS Faculty Affiliate Hyochol "Brian" Ahn establishes Brain Science and Symptom Management Center

The Florida State University College of Nursing has launched the Brain Science and Symptom Management Center, an institute for interdisciplinary research that will use brain simulation and computer technology to optimize pain and symptoms management.

Established by Founding Director Hyochol "Brian" Ahn, Professor and Associate Dean for Research in the College of Nursing and a Faculty Affiliate of the Institute for Successful Longevity, and Associate Director Hongyu Miao, a tenured nursing professor and adjunct statistics professor, the center will offer a nonpharmacological approach to pain care using transcranial direct current stimulation (tDCS) as part of a national research program funded by the National Institutes of Health...

"Traditionally, narcotics and other medications have been prescribed to assist patients with pain management, but this type of treatment has contributed toward the opioid crisis," Ahn said. "The intended outcome of the center's research will operate as a substance-abuse intervention that is non-addictive, non-invasive, non-painful electrical brain stimulation therapy. It focuses on measuring brain function, identifying the neurological source of pain and using electricity to stimulate, or massage, it away."

Ahn has been funded by several NIH grants, including nearly \$2.5 million for the project "Combination Therapy of Home-Based Transcranial Direct Current Stimulation and Mindfulness-Based Meditation for Self-Management of Clinical Pain and Symptoms in Older Adults with Knee Osteoarthritis."

"Once FDA-approved, the use of our innovative technologies will enhance the health and independence of patients with an accessible therapy solution to optimize pain and symptom management," Ahn said.

Florida has three brain-focused institutes, but the BSSMC says it sets itself apart through multidisciplinary research that involves nursing, engineering, neuroscience, mental health, statistics and data science. "The center will model education and empowerment in noninvasive brain-related medical procedures through community outreach and knowledge dissemination," Ahn said. "It will serve as a catalyst to increase awareness of pain management in the Tallahassee community and the State Legislature and is positioned to gain national and international recognition for brain stimulation and brain imaging."

## Dawn Carr wins mid-career award for work on social engagement and aging

Dawn Carr, Ph.D., a Faculty Affiliate of the Institute for Successful Longevity, has won an international award for her work on social engagement and healthy functioning for adults in later life.

Carr, Associate Professor in FSU's Sociology Department and the director of the university's Claude Pepper Institute, earned the 2022 Ewald W. Busse Research Award for excellence in the social/behavioral sciences. The award is granted by the Duke Aging Center of Duke University's School of Medicine.

The Busse award is bestowed on a junior-to-mid-career scientist once every four years, in recognition of significant contributions to aging research. Carr received her award in a June 12 virtual ceremony at the 22nd World Congress of Gerontology and Geriatrics.

The last Busse winner for social and behavioral sciences also came from FSU: Sociology Professor Miles Taylor, who won in 2017. The pandemic delayed this year's winner by one year.

"It is really a huge honor to be considered, so I was really shocked," Carr said of her award. For more information, visit <a href="https://sites.duke.edu/centerforaging/busse-research-awards/">https://sites.duke.edu/centerforaging/busse-research-awards/</a>.



Dawn Carr, Ph.D., a Faculty Affiliate of the Institute for Successful Longevity,is Director of the Claude Pepper Institute and Associate Professor of Sociology.

### Zhe He honored by the Association for Information Science and Technology

Zhe He, Ph.D., a Faculty Affiliate of the Institute for Successful Longevity and Associate Professor in the School of Information, has been honored by the Association for Information Science and Technology (ASIS&T) with its Louis Lunin Award. The award recognizes individuals who have made significant contributions to the practice of information science and technology.

"I'm thrilled to receive Lois Lunin Award from ASIS&T this year," He said. "In my career, I aspire to become an influential educator and researcher to educate next generation data scientists and conduct research that can improve population health and reduce healthcare disparities. This award is significant because it recognizes my effort and lifetime commitment to such a mission. I owe a debt to my collaborators, my students, and my mentors. Without them I would not have achieved this much in my career."

He currently serves as co-chair of the Master of Science in Information Technology program and holds courtesy appointments with the Department of Behavioral Sciences and Social Medicine in the College of Medicine and the Department of Computer Science.

Earlier this year, He was named a Fellow of the American Medical Informatics Association, an honor reserved for those who have made significant contributions to the field of biomedical informatics. In addition, he and a team of fellow researchers received an ISL Planning Grant from the Institute for Successful Longevity for their project, "Towards an AI-Assisted Application for Lab Result Comprehension for Older Adults with Multiple Chronic Conditions."

ASIS&T will present He with his honor at the group's annual meeting in October.



Zhe He, Ph.D., is Associate Professor in the School of Information and a Faculty Affiliate of the Institute for Successful Longevity.