



# Alzheimer's and Cognition Center

UNIVERSITY OF COLORADO **ANSCHUTZ MEDICAL CAMPUS**

“Healthy Brain Aging Starts Here”

June 2020

Volume 2, Issue 2



## Our Center's Anti-Racism Statement

Black lives matter.

The researchers, clinicians, and staff of the University of Colorado Alzheimer's and Cognition Center are strongly committed to addressing the unacceptable racial disparities in dementia burden, clinical care access, and research priorities.

We vigorously condemn racism in all its forms, including systemic inequities that contribute to Black people being up to twice as likely to develop Alzheimer's disease as white people. We believe that it is not enough to hold these beliefs – we must speak out, and more importantly, we must enact change.

We have developed an action plan to take meaningful steps towards these goals. You can find this on our [website](#), and we will actively listen to your feedback.

Healthy brain aging starts here. For all.

## CU Alzheimer's and Cognition Center COVID-19 Update

As of June 16th, the Memory Disorders Clinic has started opening to in-person clinic visits, at limited capacity based on the provider.

Approximately half of all appointments will continue to be completed via telehealth through the end of July (see page 3 for more information on the transition to telehealth).

To ensure patient safety, all who attend a visit in-person

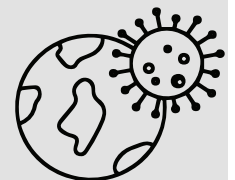
will be required to wear a mask, comply with new check-in procedures, do a temperature check and health screening, and may only bring one guest.

If the patient would like to have additional guests participate in the visit, those guests may attend virtually. Our staff will also be completing health screenings and wearing masks.

Our human subjects research studies are still suspended. How-

ever, our laboratory research has opened up again.

We appreciate your understanding and patience as we adapt to these new changes in our clinic. As always, our patients' and our research participants' safety is of the utmost importance to us and remains our highest priority.





## Ins and Outs of Research - MRI

Magnetic Resonance Imaging (MRI) is often used in a clinical setting to help a doctor diagnose a disease or to evaluate the extent of an injury. In our research, MRI scans help us track structural changes in the brain over time and allow us to see whether those changes coincide with other symptoms.

From the participant's perspective, the experience of having a research MRI scan is very similar to having an MRI scan as part of a normal clinic visit. As a result, we often get asked by a participant if they can share a copy of their research MRI scan with their primary care physician, so they can look at it and see whether they may have a disease, such as Alzheimer's. However, research MRI scans are actually very different from clinical MRI scans and the two are not interchangeable.

When you go to a doctor with a complaint or an injury and they put in an order for you to have an MRI scan, the images obtained from that scan are standardized by a radiologist, who is a doctor trained to interpret medical images and make a diagnosis based on specific symptoms.

For a research MRI scan, the type of images that we obtain are chosen specifically based on the research question that the

research team is trying to answer, and they are not designed to provide a diagnosis for the participant. MRI scans that are performed for research purposes are usually not formally interpreted by a radiologist.

In the rare case that a clinically-relevant abnormality is noticed on a research MRI scan, the participant is notified. They are then encouraged to receive a doctor-ordered clinical MRI scan to assess the abnormality and to determine whether any further treatment is necessary.

In research, the MRI scan itself is used to help answer the questions we are studying. However, the results from the research MRI scan may not start to be meaningful until the end of the study, when all of the data are grouped together and analyzed, and even then, what those results mean for any individual participant may still be unclear.

Research MRI scans are very important for understanding how brain structure relates to cognitive symptoms, and hopefully research in this area will contribute to our ability to use MRI data to help diagnose and inform treatment plans for patients with neurodegenerative diseases, such as Alzheimer's and Parkinson's.

## Congratulations



Congratulations to Dr. Brianne Bettcher, who was promoted to Associate Professor of Neurology! Her new position starts July 1.

## Upcoming Event

### Healthy Brain Aging: Staving Off Memory Decline

What is healthy aging from a 'brain' perspective? Geriatric neuropsychologist Brianne Bettcher, PhD discusses protective factors for 'successful aging,' lifestyle factors that might slow or prevent memory decline, and controversies in the field of aging science.

Virtual event. Please register with the [Denver Public Library](#)

Friday, July 10 at 1:30 pm MDT

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## Investigator Spotlight: Christina Coughlan, PhD



Christina Coughlan, PhD, is a Senior Faculty Research Instructor in the laboratory of Dr. Huntington Potter at the University of Colorado Alzheimer's and Cognition Center.

Dr. Coughlan was drawn to neuroscience research in large part because it is analogous to

the "black box". While we can assess inputs to and outputs from the brain, the processing that happens in between is unique for every individual.

In the Potter lab, Dr. Coughlan's research is focused on small vesicles, called "exosomes," that are shed from cells throughout the body and released in large quantities into the blood. Exosomes carry important "cargo" but can also sometimes carry toxic proteins such as amyloid.

When delivered to other cells, this toxic cargo may contribute to the spread of diseases, such as Alzheimer's. Measuring this cargo also has the potential to serve as a biomarker of dis-

ease progression, something Dr. Coughlan is also doing.

Dr. Coughlan also has a long-standing interest in a research concept called "clearance," which focuses on the removal of toxic proteins, once they are generated. By preventing toxic proteins from damaging other cells, it may be possible to slow or halt disease progression. She believes that enhancing the body's natural clearance processes could serve as a way to reverse Alzheimer's.

Dr. Coughlan is grateful for the opportunity to add insight to our understanding of the "black box" that we call the brain through her research.

## Virtual Memory Disorders Clinic during COVID-19

Telehealth is not a new way of seeing your doctor, but insurance coverage often limited its use prior to the pandemic. Previous restrictions were lifted by the federal government due to COVID-19, and our Memory Disorders Clinic worked to convert all appointments to virtual visits to keep our patients safe.

Fortunately, our type of neurology visits work very well as virtual visits. Our neurologists get most of the information they need to help them make a diagnosis by talking with their patients. Cognitive screening tests can be administered virtually, as can most parts of a neurological examination. The telehealth visits are also secure and HIPAA compliant.

The shift to using new technology can be difficult for our

patients. To help with connecting to the virtual appointment, our medical assistants call our patients and complete a step-by-step walk through to get the video and sound set up.

One benefit of telehealth visits is that, with the patient's approval, there can be multiple attendees on the call. This has allowed family members from all over the country to attend visits.

Telehealth also allows patients who live far from Denver to be seen by our neurologists. As a result, we have seen some of our patients who may not have been able to attend an appointment previously due to long travel distances, as well as patients who may feel uncomfortable traveling at this time.

Finally, for many of our patients, coming into the clinic can

be a stressful experience. By doing their clinic visits from their homes, they are able to remain in a place where they feel comfortable and safe, which can alleviate some of the anxiety and discomfort they may feel when going into the doctor's office.

As UHealth opens to in-person visits, the success of the transition has shown that telehealth visits are an important resource for the patients we serve. We will continue to make telehealth visits available to those who found them to be a good option.

