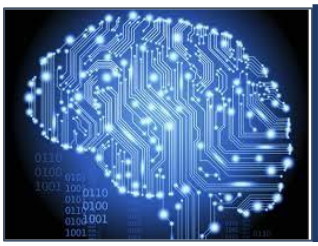


JOHN VAN GEEST CENTRE FOR BRAIN REPAIR & ADDENBROOKES HOSPITAL
JANUARY 2021

Introduction

This year has, of course, been dominated by Covid-19 which turned everything upside down! We had to stop our face-to-face outpatient clinics in March and were only allowed to start them, in a fashion, in September before having to stop them again as a new wave of infections arrived in the New Year. We have though managed to carry on during that time with a variety of phone and video consultations which we are keen to continue for those of you who would like this.

Our research was also suspended in March as the university, and all its buildings, closed. Work recommenced over the summer but is still not running at full capacity due to the coronavirus restrictions in the lab and research clinics.

Despite these challenges, we have managed to carry on with a whole range of exciting research projects. This includes work around how HD affects thinking and decision making and how we can better detect these types of problems and then find new ways to manage them. We are also, as ever, keen to take forward new drug trials including one with a drug called felodipine. This drug has been used for years to treat hypertension, but we are looking to see how well tolerated it is by people with HD in the first step to investigating whether it may be a possible disease modifying therapy based on pioneering work from our colleague here in Cambridge, David Rubinsztein. We are now also revisiting our work looking at how sleep impacts on all aspects of HD.

Finally, we would like to thank you all for your perseverance and patience over this last year. Many of us have not been around as much as we would like because of the need to undertake new duties in the hospital around the pandemic. We also greatly miss having Sue Hill around now that she has retired. Hopefully though, life will slowly return to normal as the pandemic subsides and the vaccine becomes more widely available. On this note, I would encourage you all to have the vaccine when offered, unless there are very good reasons for not being vaccinated. So, take care and here is looking forward to an even more successful year of working together with you all in 2021.

Huntington's disease NHS Clinic

IMPORTANT CHANGES TO OUR CONTACT DETAILS

The clinic team and receptionist continue to work from home unless we have face-to-face appointments booked. To reach us please leave a message on the HD clinic answerphone or email the clinic email address and we will get back to you as soon as we can. All calls to the main reception are now also being redirected to the HD clinic answerphone.

HD Clinic direct line: 01223 761863 – leave a message and we will call you back
HD Clinic email: add-tr.hdclinic@nhs.net

Over the last year there have been some major changes to the HD clinic and we would like to thank you all for your patience and flexibility as we have adjusted to this new way of working. We are very proud to say that we have been able to keep clinic running throughout the year and have managed to keep waiting times for appointments to within a few weeks of when they were due. We have conducted an impressive 227 phone, Skype or Zoom calls and while they are not the same as coming to see us in person, the feedback from some of you has suggested that not having to fight your way through Cambridge traffic, travel long distances or arrange transport to bring you to clinic has been a positive experience that some of you would like to maintain going forward!

From September we were able to start face to face appointments again, albeit in a much-reduced capacity, although this has since been curtailed with the new lockdown at the beginning of 2021. However, we are still able to see patients with an urgent medical issue who are unable to be adequately managed via a virtual/telephone appointment. We are hopeful that this will soon change to allow us to assess those of you who don't have access to the right equipment or struggle to communicate over the phone, and those who need a formal assessment of your HD to aid your care. We are continually reviewing this situation and, as guidelines change, we hope to get back to larger face-to-face clinics as and when it is safe to do so.

APPOINTMENTS

HD Clinic appointments are now being arranged by the hospital. You will notice that:

- Your appointment letters will come on Cambridge University Hospitals NHS Foundation Trust headed paper
- To re-arrange your appointment, you will need to ring the hospital number contained in the appointment letter.

To help keep everyone safe during the COVID-19 pandemic we have:

- Reduced the number of staff and patients in the clinic
- Asked that only 1 companion/carer attends with each patient
- Put in place extra cleaning routines, including cleaning between each appointment
- Moved the waiting area to inside the clinical suite to reduce contact with other people in the building

If you are sent an appointment, please still attend unless we tell you otherwise. If you would prefer not to have face-to-face appointments at the moment, please let us know.

An update from the Huntington's disease Association

Helen Santini – Specialist HD Advisor (HDA)
Telephone: 01279 507656
Email: helen.santini@hda.org.uk

As many of you will be aware, Sue Hill retired this summer. Sue was a fantastic asset to the HD clinic and to the HDA. She had a phenomenal amount of knowledge and experience about HD that she had acquired over many years working with families and patients, first as a nurse at the Sue Ryder home in Ely and then as a Regional Care Advisor for the HDA. Her expertise, resourceful attitude and her genuine kindness will be missed by us all. At the moment there are no plans to replace Sue, partly because the way in which the HDA's work has had to change over this last year, but Helen Santini is currently covering Sue's work so please do continue to contact the HDA if you need their support (using the details above).

The HDA have risen magnificently to the challenges of COVID and continue to help and support families and patients with HD, albeit virtually rather than face-to-face. Their website is a great resource where you can find advice and information on almost all aspects of living with HD and it is also used to advertise their web events (https://hda.org.uk/events). Before Christmas they held a virtual Christmas coffee morning and two webinars on anticipatory grief and oral health in HD, and there are many more events planned for the New Year.

If you would like to be kept up-to-date with all future events please go to their 'keep in touch' link (https://www.hda.org.uk/get-involved/communication-consent) where you can sign up to email notifications from the HDA.

Enroll-HD

Funded by Cure Huntington's Disease Initiative (CHDI)
Kate Harris – Research Assistant, Miriam Schaepers – PhD Student,
Sarah Mason – Research Associate

The Enroll-HD study is a large, worldwide cohort study with around 20,000 participants from over 172 hospitals and 19 different countries. In Cambridge we currently have over 140 participants who take part in the study. Study visits involve completing questionnaires, thinking and memory tests and giving a blood sample along with the normal assessments that are completed in clinic. An anonymised version of the data from Enroll-HD is available to all researchers from any of the sites involved in this work. This means that we have access to information about a very large number of people with HD, from all around the world, that can help us to answer questions about HD in a fast and efficient way that was not possible before. We have used this data previously to explore different types of HD (William Kuan) and now to investigate whether there is a relationship between taking different types of dopamine acting drugs (e.g. olanzapine, tetrabenazine, sulpiride etc) and thinking in HD (Kate Harris). We are now using the data to investigate which factors contribute to problems with financial management in HD. If you would like to participate in the Enroll study, please contact Kate on kh600@cam.ac.uk or 01223 767379.

In the New Year we will start to participate in two new sub-studies as part of Enroll-HD: the plasma collection study, which will be done through the annual blood test and the Later Stage Assessments study, that seeks to develop a series of assessments that are more appropriate for patients with advanced HD. If you are eligible, you may be asked to participate in either or both sub-studies when you next come to clinic.

Apathy in Huntington's disease

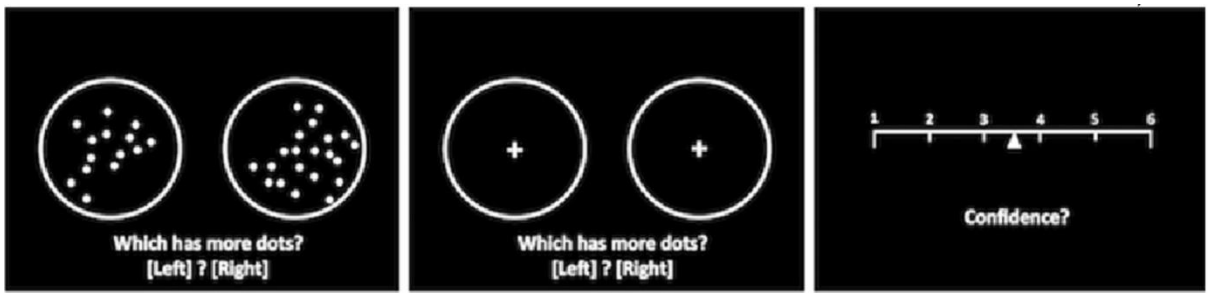
Dr Sarah Mason – Research Associate
Funded by the Huntington's disease Association

Apathy, or a loss of motivation, interest and enthusiasm in your everyday life, is a big problem in HD and something that we often hear about in clinic. There is little doubt that apathy has a significant impact on the quality of life of both patients and their families and so getting a better understanding of this aspect of the disease could lead us to find treatments or therapies that make a meaningful impact on the wellbeing of people with HD. We have been interested in finding the best way to measure apathy as this is essential when we come to designing a meaningful trial to test agents designed to improve apathy in HD. Last year we published a paper where we demonstrated that a touch-screen assessment of motivation, which can be used in both humans and mice, had a strong relationship with self-reported apathy and is therefore a potentially useful task in future trials looking to treat apathy *(Heath CJ, O'Callaghan C, Mason SL et al, 2019)*. Importantly though, over lockdown we have had the opportunity to look at some of the data we had already collected which looked at the emotional side of apathy, so less about what people with apathy "did" but more about how they "felt". Interestingly, we found that levels of apathy had a strong relationship to a patient's ability to recognise and respond to their own emotions. This gives us a whole new perspective on what may be driving apathy in HD and is work that we hope to continue in the New Year. If you would like to know more about this work, please contact Sarah (slm64@cam.ac.uk or 01223 331160).

Decision making in Huntington's Disease

Alice White - final year PhD student
Funded by UCLA and the Cambridge Trust

What did you see? What did you think you saw?
In daily life we often must make quick decisions about what we have seen. We also need to learn from our decisions in the past. The best way to do this is to reflect accurately on decisions we have already made ("How did I do?") and use our confidence to guide future choices ("I am very sure I made the right decision"). Practically, it is quite difficult to study the many decisions we face in daily life, and the circumstances can be very different for different people. In this study we have taken an example of decision-making which is very simple, to better understand day-to-day decision making. This is a bit like how a meteorologist might use the wind pattern and wind speed on a particular day to give them an idea of what the weather will be like over the following week. Some of you reading this newsletter may remember the dots task as shown in the image below, which requires you to choose which circle contains more dots, then report your confidence about the accuracy of your decision.



We have now used advanced computational techniques to make conclusions about the way people are behaving during this task, including identifying which parts of the task they find difficult and why this is the case. These results have implications for understanding not only how the brain normally performs this function (how should we measure memory and thinking if people with HD have problems with perception?) but in everyday choices (might people with HD misunderstand a long letter from the bank?) and we look forward to studying these questions over the next 12 months. Sam Hewitt was fundamental in setting up and completing this project. In 2020 he left our centre to begin a PhD at the University of London in Computational Psychiatry and in 2021 Alice will also be leaving after her PhD studies are completed to take up a new position in Berlin on a related topic but this work will carry on.

Triage: A new smartphone app

Building on work we have done on how we see our own thinking (metacognition) and decision making, Alice has developed a new mobile phone app. Over the last couple of years, we have found that HD patients can make good decisions when information is straightforward, but when it becomes more complex some patients make unusual decisions. The app is designed to help users "triage" their correspondence; to identify emails and letters that require urgent attention and to highlight scams and misleading correspondence. Users take a photo of their letter and Triage scans it for important words and phrases. The app then alerts the user to the severity of the information contained within the letter, using a simple traffic light rating. For example, if you received a long letter from your bank Triage would alert you to the important information contained within it, perhaps "credit limit reached". It categorises the information as red (urgent, take action now!), amber (possibly urgent, read carefully) or green (probably safe). With this we hope users can make better decisions themselves and live independently for longer. We have tested the app in a control population and plan to run a randomised-controlled trial to test its effectiveness in patients in 2021. Taketomo Isazawa, a PhD student in the Department of Physics, has helped to build and test Triage.

**Image shows the app logo which represents how the app uses alerts to communicate the urgency levels of emails or letters.*

Financial Decision-making in HD

Funded by Huntington's disease Association
Dr Sarah Mason – Research Associate

Problems with decision making can have a significant impact on a person's ability to live their everyday life. Building on Alice's work I have been investigating whether changes in decisions are having an impact on how people with HD manage their money, and whether this makes them more vulnerable to financial abuse. We started this project a couple of years ago and a little over 30 of you and many of your companions have participated in the study so far. Over lockdown we have been looking at the data collected so far. Reassuringly, people who carry the gene but have not been diagnosed with clinically having HD behave exactly like our unaffected control population. However, unsurprisingly, financial decision making appears to change as the disease progresses with more advanced patients making more impulsive and irrational decisions. Finally, making decisions about money is strongly associated with a persons ability to accurately judge the thoughts, feelings and intentions of other people. This may mean that patients are less able to tell whether the person they are talking to is trustworthy or not which could explain why they find it harder to know if someone is trying to trick them.

During lockdown, Kate Harris and I have taken the opportunity to use the Enroll-HD data to ask the question "what other changes happen at the same time as, or immediately before people with HD start to become less independent managing their money?" We are hoping that this will shed some light on what challenges associated with HD lead to difficulties managing money. After our first analysis it looks as though increased irritability, apathy and depression, along with a decline on some of the cognitive tasks that involve processing speed have a strong relationship with reduced financial autonomy, regardless of the stage of disease people are at.

Over the next year we will be contacting everyone who initially participated in our studies and asking them whether they would like to come back and repeat the study to see whether anything has changed. We will also be setting up a series of focus groups to discuss the issue of financial abuse with patients and their families to see how much of a problem this is in the real world and share some of your first-hand experiences. If you would like to know more about this work please contact Sarah (slm64@cam.ac.uk or 01223 331160)

Social decision-making in HD

Funded NIHR Biomedical Research Centre – Dementia theme
Miriam Schaepers – First year PhD student

Miriam Schaepers has recently joined the group as a PhD student after completing her master's degree at UCL, where she focused on research in Alzheimer's disease. In addition to her PhD project, Miriam will be helping with the HD clinic and the Enroll-HD study, so she will have the chance to get to meet many of you during the next few years.

Miriam's PhD research will build on Alice's work, as it will also focus on decision-making in HD but from a social perspective. Many of the decisions we make on a daily basis do not only affect ourselves but also the people around us. This makes

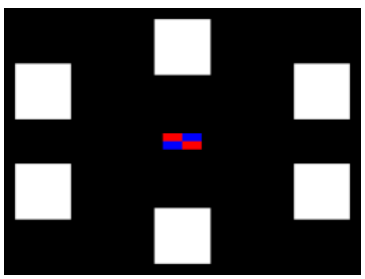
decisions-making a lot more complex as we have to consider not only our own preferences but also other peoples' thoughts, feelings, intentions, and preferences. These are however often not directly communicated and have to be inferred from facial expressions, body language, or subtle hints. Research suggests that some HD patients struggle with making inferences about others' emotions and intentions. We would therefore like to explore whether those issues also make social decision-making more difficult for HD patients by measuring patients' abilities in making social decisions, as well as the underlying functions that are needed for social decision-making. Problems in social decision-making can lead to misunderstandings and conflicts, which can be frustrating for patients and their relatives. The research question will therefore provide insight into how HD affects peoples' ability to navigate social situations.

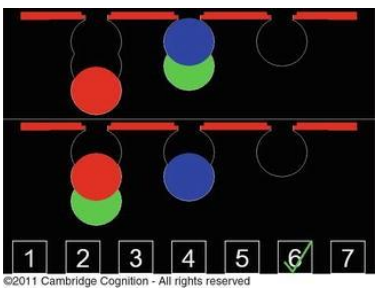
Dopamine in Huntington's disease

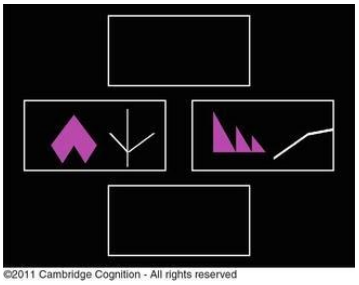
Kate Harris – Research Assistant

Funded by NIHR Biomedical Research Centre – Dementia theme

Dopamine is a chemical in the brain that is important for a variety of processes including movement, memory, attention and reward processing and importantly for our work, has the potential to be involved in decision-making, apathy and sleep. We know that dopamine contributes to some of the motor features of HD and therefore HD is often treated with drugs which reduce dopamine transmission in the brain. It is though currently unclear whether dopamine contributes to cognitive impairments in HD, although we have some preliminary evidence to show that dopamine lowering/blocking medications might be detrimental to certain aspects of cognition (Harris *et al.,* 2020). We are currently conducting a study called DOPA-HD, which investigates the effects of increasing and decreasing levels of the brain chemical dopamine on cognition in HD. During DOPA-HD, participants visit our centre on four separate occasions during which they take one of the following: a drug which activates the dopamine receptor (effectively increasing dopamine levels), a drug that blocks the effects of dopamine (effectively decreasing dopamine levels), both of these drugs at the same time (to look at the effect on specific receptors), or a placebo. After a break of 90 minutes, participants undergo some computer based cognitive tasks. The results of this study will help us to elucidate the **immediate** effects of increasing and decreasing dopamine in the brain on cognition in HD. If you would like to participate in this study, please contact Kate Harris on kh600@cam.ac.uk or 01223 767379







Sleep in Huntington's disease

Dr Zanna Voysey - Clinical Research Fellow
Funded by the Association of British Neurologists/Guarantors of Brain

In the past year, we successfully re-started the sleep study which aims to look at the nature and significance of abnormal sleep in HD. Zanna has been analysing the current data that we have from a longitudinal study that we set up in about 2008 whilst also recruiting new individuals with HD to stay overnight at the sleep lab in Addenbrooke's. This study aims to look at how sleep changes evolve over time and may relate to clinical features in HD. Due to COVID-19, we had to adapt and so we carried on with collecting new data through virtual consultations with patients or even by posting out activity watches in order to collect information. Although 2020 has proven to be a challenging one we are very excited by what we plan to do next in this study in collaboration with Dr Alpar Lazar who is at the University of East Anglia (and some of you may remember as he worked with in our group for several years). We also have a collaboration with John O'Neill's group in Cambridge who look at daily cyclical rhythms in cells including from patients with HD. Zanna Voysey is now on maternity leave but will continue with this project when she returns in 2021.

Image to show the setup for the sleep study.
This image is courtesy of University of East Anglia.

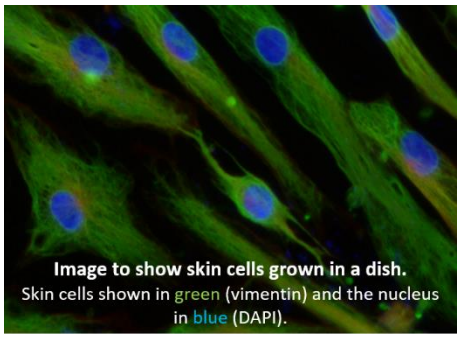


Image to show skin cells grown in a dish.
Skin cells shown in green (vimentin) and the nucleus in blue (DAPI).

Surface Enhanced Raman Spectroscopy (SERS) in HD

Funded by NIHR Biomedical Research Centre – Dementia theme
Tagore Nakornchai – Clinical Research Associate

In the New Year we will be taking on an exciting new project for which we have been collecting pilot data for some time; this involves looking at developing a new blood test to monitor the progress of Huntington's Disease. This work will build on a study that we recently published in collaboration with the Department of Chemistry (Heufner A, Kuan W et al, 2019). It is hoped that this will be used alongside the clinical examination/ questionnaires to give a clearer picture of how well you are doing and will become even more important as we start to test more agents designed to slow down the disease process.

Participating is straightforward; all we need is a blood sample along with some routine examinations that we would normally do in clinic. We then send this sample to a lab to be analysed using a special laser device and we will then look to see how these results correlate with

disease status. You may be asked to participate in this study at your next clinic appointment but if interested do also let us know by emailing Tagore (tn350@cam.ac.uk) or Katie (kera2@cam.ac.uk).

Clinical Trials Update

CLINICAL TRIALS TEAM:

Katie Andresen
Clinical trials co-ordinator
Funded by CRN Eastern
Email: kera2@cam.ac.uk
Telephone: 01223 331141

Katie manages all our clinical trials. If you have any questions about new or ongoing studies please feel free to contact her.

Tagore Nakornchai
Clinical Research Fellow
Email: tn350@cam.ac.uk
Telephone: 01223 331160

Tagore is the medical doctor working on the trials.

ASO studies

Funded by Roche Pharmaceuticals

We are involved in ongoing trials to investigate the impact of silencing the abnormal HD gene product that are funded by Roche pharmaceuticals. The agent, called an antisense oligonucleotide or ASO, has been designed to lower the level of Huntingtin in the brain by telling cells to delete the 'message molecule' that is being coded for by the Huntingtin gene. The American Pharmaceutical company IONIS began the trials back in 2016 with the initial results published in 2019, *(Targeting Huntingtin Expression in Patients with Huntington's Disease. Tabrizi S.J et al. N Engl J Med, 2019).* Roche then bought the license to the drug in 2018 and renamed the agent Tominsersen.

In 2019 the phase 1/2 Open Label Extension study was completed that involved 46 patients worldwide (including 6 at our site) and in this study all patients received active drug either every 4 or 8 weeks. Results have not been published from this study yet. The follow-on study, called Gen Extend, started in September 2019 and 4 patients from our site were enrolled. The study is still ongoing and when completed hopes to provide answers about the longer-term safety and tolerability of Tominsersen.

In October 2019 we also began recruitment to a parallel study being run by Roche, the phase 3 global Generation HD1 study. This study hopes to determine whether the drug does actually slow down the progression of HD in a clinically meaningful way as well repeat the safety assessments mentioned for the Gen Extend trial above. In April 2020 the study completed recruitment of 791 participants in 80-90 sites worldwide. This is a double-blind study which means participants and study teams do not know who is receiving active drug or placebo. This study is currently ongoing.

During the initial lockdown we had to postpone all study visits but from August 2020 we have been able to continue the study visits as normal, with the support of the Clinical Trial Facility in Addenbrooke's Hospital who have ensured that the study can continue in a COVID safe way. As the

government guidelines changed for the further lockdowns, we have been able to continue this work, uninterrupted. Going forward, we are committed to making sure we can continue collecting data and contributing to the clinical trials in Huntington's Disease.

Felodipine

Funded by UK Dementia Research Institute

This year we are planning to start a new trial that has originated from work done entirely in Cambridge. It will use a drug called Felodipine which is an already licensed and is commonly used to treat hypertension. Previous work in the lab has shown that this drug is able to reduce the level of mutant huntingtin (the process we believe drives the disease in HD) in the brain. The benefit of using a drug that is already being used for another condition (so called drug repurposing) is that we have greater confidence that the drug can be used safely and have some idea of what, if any, side-effects to expect. However, because we are using felodipine in a slightly different way to the way was intended, we need to check that the drug can be tolerated by people with HD at the dose we need to use. So, we are planning to conduct a first trial to look at the feasibility (whether the design of the trial is manageable before we start a larger study) and tolerability (does the drug cause side-effects that are too significant to tolerate) of Felodipine in HD patients while also exploring whether there is any suggestion of it slowing disease progression in HD.

Neflamapimod (EIP- NFD- 401)

Funded by EIP Pharma

Kate Harris – Research Assistant

Before the lockdown we were part-way through a clinical trial of a new drug called neflamapimod in patients with early-stage Huntington's disease (HD). This drug is being developed by EIP pharmaceuticals and has been shown to improve aspects of memory which involve a region of the brain called the hippocampus. We have previously shown that the hippocampus contributes to some of the cognitive problems in HD (Begeti *et al* 2016 and Harris *et al* 2019), and therefore the purpose of this trial was to assess whether this drug could improve cognition in HD.

The trial was split into two 10-week treatment periods, separated by a washout period (when no drug was given) for 8-12 weeks. Participant were randomly assigned to receive either neflamapimod (40mg) or placebo first, before switching to the alternate for the second treatment period. Monthly assessments on mood, learning and memory were undertaken throughout the treatment periods. Unfortunately, this trial was interrupted halfway through due to COVID-19. During the period of lockdown, the results of another trial using this drug in another brain disease were released which suggested that the drug might in fact be working in a different way to that which was originally proposed and then only at higher doses than those being used in our trial. As a result, we decided with the company to end our trial as it now seemed very unlikely that this drug would help people with HD. This was confirmed when we undertook a preliminary analysis of the results of our trial. We are now looking to analyse the data more formally and then publish our results.

Amygdala in Huntington's Disease

Funded by NIHR Biomedical Research Centre – Dementia theme
Shaline Fazal – Post Doctoral Research Associate, Kate Harris – Research Assistant

For many years we have been very interested and intrigued by a structure in the brain called the amygdala. The amygdala is known to have a primary role in the processing of memory, decision-making and emotional responses and is therefore very relevant to the work we do. Researchers interested in HD have historically paid little attention to the amygdala because it is not thought to be one of the key areas of the brain effected in HD. But previously we have shown that it is affected in early HD *(Mason SL et al 2015)* so we thought it important to look at changes in the amygdala at a cellular level. We aim to use post-mortem tissue from HD donor brains and healthy controls to do this work.

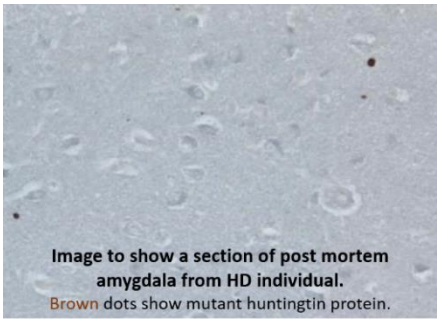


Image to show a section of post mortem amygdala from HD individual.
Brown dots show mutant huntingtin protein.

The Cambridge Brain Bank

You are probably familiar with organ donations of the heart, kidneys or eyes to sustain the health or even the life of people in need. Brain donation for research is a precious and unique gift. Scientists can learn and understand more about disease processes when they are able to work on donated tissue. The donation of a brain and other parts of the nervous system is a big decision and needs to be discussed with family and friends. Advice is available from the Cambridge Brain Bank research nurse Jenny Wilson who would be very happy to discuss any concerns or questions you or your family may have. Telephone number 01223 217336 or email brbank@addenbrookes.nhs.uk for further information as well as visiting the website: www.cuh.org.uk/tissue-bank

Papers over the past 12 months regarding Huntington's Disease

The sleep and circadian problems of Huntington's disease: when, why and their importance. Voysey, Z., Fazal, SV., Lazar, AS., & Barker, RA. Journal of Neurology. 2020 Dec 23.

The Treatment of Sleep Dysfunction in Neurodegenerative Disorders. Voysey ZJ, Barker RA, Lazar AS. Neurotherapeutics. 2020 Nov 11.

Hydrocephalus Complicating Intrathecal Antisense Oligonucleotide Therapy for Huntington's Disease. Stoker TB, Andresen KER, Barker RA. Mov Disord. 2020 Oct 30.

Huntingtin-lowering strategies for Huntington's disease. Barker RA, Fujimaki M, Rogers P, Rubinsztein DC. Expert Opin Investig Drugs. 2020 Oct;29(10):1125-1132.

Implantation of the clinical-grade human neural stem cell line, CTX0E03, rescues the behavioral and pathological deficits in the quinolinic acid-lesioned rodent model of Huntington's disease.

Yoon Y, Kim HS, Jeon I, Noh JE, Park HJ, Lee S, Park IH, Stevanato L, Hicks C, Corteling R, Barker RA, Sinden JD, Song J.

Antidopaminergic treatment is associated with reduced chorea and irritability but impaired cognition in Huntington's disease (Enroll-HD). Harris KL, Kuan WL, Mason SL, Barker RA. J Neurol Neurosurg Psychiatry. 2020 Jun;91(6):622-630.

The Clinical Features and Progression of Late-Onset Versus Younger-Onset in an Adult Cohort of Huntington's Disease Patients.
Anil M, Mason SL, Barker RA. J Huntingtons Dis. 2020;9(3):275-282.

Serum Raman spectroscopy as a diagnostic tool in patients with Huntington's disease.
Huefner A, Kuan WL, Mason SL, Mahajan S, Barker RA. Chem Sci. 2019 Nov 14;11(2):525-533.

Webpages of interest

Our Webpage:

http://www.thebarkerwilliamsgraylab.co.uk/

HD Buzz: https://en.hdbuzz.net/

Facebook page: Barker Williams-Gray Lab

Huntington's Disease Association Webpage:

https://www.hda.org.uk/

Huntington's Disease Youth Organization Webpage:

https://en.hdyo.org/

Twitter page:@PDandHDLab

Donations

If you would like to donate to any of our research projects, then please do contact Danielle Daft on dmj34@cam.ac.uk or 01223 334121.

You can write to us at the below address: John Van Geest Centre for Brain Repair, E.D. Adrian Building, Forvie Site, Robinson Way, Cambridge, CB2 0PY