LOOKING BACK, AND LOOKING AHEAD



WE'VE COME A LONG WAY

It's amazing to think that it's been nearly seven years since the first ADVANCE participant walked through the doors of Headley Court for his first ADVANCE visit in August 2015. Since that day, we have seen 1,145 participants for their baseline visits and 665 for their first follow-up visits, we have published the first ADVANCE findings on cardiovascular risk and are expecting the mental health findings to be out before summer, and we have grown the ADVANCE team from just a few members to more than 20 people! What a great journey it has been so far, and we are only at the start of it - the study will continue for at least another 15 years. We look forward to seeing our participants for their other four follow-up visits over the coming years - and it's mind boggling to even try and think about the amount of exciting data that will be collected from all those study visits.

SPREADING THE WORD ON ADVANCE

The word about ADVANCE has been spreading fast in the last few months. After the publication of the first ADVANCE baseline cardiovascular risk results, the study was featured in an editorial of the journal Heart, and other news stories were published online. ADVANCE work was also presented at the Office for Veterans' Affairs Research Summit in February. You can scroll down to read more about this. In this newsletter you will also find a brief video summarising the baseline cardiovascular risk findings.

IN OTHER NEWS...

We are excited to let you know that the ADVANCE TBI (traumatic brain injury) study is kicking off soon. Read more about it a couple of pages down. We have also included a brief video explaining why the ADVANCE cohort is special in terms of TBI.

As always, thank you to all our participants for making ADVANCE the amazing project it is today. This time we want to say a special thank-you to the ADVANCE Participant Panel who met for the third time in January. Find out what was on the agenda further down in this newsletter.



ADVANCE cardiovascular risk findings in short



Watch the brief video on the left for a summary of the ADVANCE baseline cardiovascular risk findings.

The video is a clip from the ADVANCE webinar held in December with Dr Christopher Boos. Dr Boos leads on cardiovascular research within the ADVANCE study. You can watch the full webinar <u>here</u>.

For more videos on ADVANCE research and the study in general, head over to our <u>YouTube channel</u>.

If you would like to be interviewed about your experience with ADVANCE, get in touch. We can't promise worldwide fame, but we will try our best to offer a good chat!

ADVANCE in the news

After the publication of the first ADVANCE baseline cardiovascular risk results, the study received quite a lot of press attention. For example, ADVANCE was featured in an editorial of the scientific journal that published the research results. The editorial, called 'Forever wounds of the forever war', was written by Dr Ian Stewart (US Air Force) and can be read <a href="https://example.com/here-editorial-new-editorial



The Office for Veterans' Affairs Research Summit



The Office for Veterans' Affairs Research Summit took place in February, and the ADVANCE team were invited to attend and give presentations.

ADVANCE PhD student Dan Dyball (pictured) and King's College London lead for ADVANCE Prof Nicola Fear presented the ADVANCE baseline mental health findings. In addition, ADVANCE project board member Prof Anthony Bull gave a presentation on the burden of injury from recent conflicts. Dr Howard Burdett, ADVANCE research fellow, presented a poster on the ADVANCE-INVEST transition study. There is a lot going on at ADVANCE at the moment!

THE THIRD ADVANCE PARTICIPANT PANEL MEETING

The ADVANCE Participant Panel met for the third time on 19th of January. The panel plays a vital role in how the study is conducted, and it was another productive meeting. On the agenda this time were the ADVANCE baseline mental health findings, the results booklet that participants receive after their ADVANCE visits wearable technology to monitor activity levels, and the ADVANCE-INVEST transition study, which looks at military to civilian transition.

The participant panel meetings are chaired by Anna Verey, ADVANCE research assistant from King's College London. Feedback from the panel is reported back to the ADVANCE project board.

Huge thanks to all members of the participant panel. The panel's input really helps shape the study and steer it in a direction the participants feel is right.

Have your contact details changed?

Let us know by contacting us directly or by completing our online Contact Form via this QR code:



ADVANCE TBI gets off the ground

In one of our 2021 newsletters we told you about the ADVANCE TBI study that looks at traumatic brain injury (TBI) in the ADVANCE cohort. After a lot of preparation, we now have all the TBI staff in posts, and we will soon start inviting participants to take part in the study.

One of the researchers working on the TBI study is Dr Neil Graham, a clinical lecturer in neurology from Imperial College London. We caught up with him to chat about the study, and in the below video clip Neil explains what makes the ADVANCE cohort especially interesting in terms of TBI. You can watch the full interview here.





All eligible ADVANCE participants will be offered the chance to take part in the TBI study.

Our aim is to first of all define what kind of injuries the ADVANCE participants have had. And we then want to look at, in great detail, the consequences of those injuries.

The tests the participants will undergo if they take part in the TBI study include an MRI brain scan, blood tests to look at biomarkers in the blood, genetic tests and memory tests.

PARTICIPANT VIEW: Stuart Stirling

Age: 50 Rank: Sargent

When and where were you deployed? I was posted out to Afghanistan and Iraq three times, the first time being the hardest. In 2008 I was deployed to Afghanistan for a month, then posted to the Red Arrows in Scampton, Lincoln.

Why did you choose to take part in ADVANCE? To benefit young guys in the military - I think the research is very important for future treatment and care of our soldiers. I also thought it would be good to get a health check-up every few years. Your fitness level must be good when you're in the military, but with no fitness tests to pass after leaving the military you don't tend to think about it.

How did you find your ADVANCE visits? Very enjoyable. Everyone is friendly, chatty and very professional.



What was the best part of the ADVANCE day? X-ray and DEXA are very interesting, and the debrief at the end of the day is informative.

What have you been up to since you left active service? I work at Babcock RAF Wittering fixing aeroplanes. I work with many of my friends from our Afghan days. The best thing about working there is seeing all the new men and women coming in very nervous, and then 20 hours later they can fly a plane. Great to see the young ones having the skills for the future.



Stay with the ADVANCE Study until the end, see it through.

What's your favourite way to spend your weekends? Going to the park with the grandkids and socialising with friends, although all the pubs seem to be closing down, which is sad.

What are your top film and book of all time? 'Shawshank Redemption' (1994) and 'Barefoot Soldier' by Johnson Beharry.

What three words would you use to describe your experience with **ADVANCE?** Friendly, professional and informative.

Have you got any words of wisdom for your fellow ADVANCE participants? Stay with the ADVANCE Study until the end, see it though.

MEET THE TEAM - STEFAN SPRINCKMÖLLER

What is your role within ADVANCE? As a database manager, I am involved in the processing, structuring and cleaning of all data collected from the ADVANCE participants. I work closely with the clinical team and researchers, sort of acting as the middle man between data collection and data analysis.

What jobs have you had before joining ADVANCE? I have been working in jobs related to public health and data management over the past five years. In the UK, I worked as a data manager for the Intensive Care National Audit & Research Centre (ICNARC), and before that in the US I worked as a research coordinator at the University of Massachusetts Medical School.

What do you enjoy most about your job? Working for something that has a larger purpose. Data is a catalyst for change. We are collecting great amounts of meaningful data over a long period of time. This allows us to understand the past and present 'pictures' of our participants. These pictures push us to go beyond the numbers and make informed decisions that will shape policy and future outcomes in the real world.



Stefan waiting for Peruvian food in a Peruvian restaurant, in his Peru jersey.

What are the biggest challenges of your job? The biggest challenge is definitely 'we have all of this data, so what?'. We can collect thousands of data points, but it is crucial to understand the stories behind the data and what they are telling us, and then act on those stories. This is a huge challenge for everyone involved.

If you could see all our participants together, what would you say to them? You are the heart of ADVANCE. Having worked in other clinical studies, including ones with participants from the Armed Forces, ADVANCE stands out due to its length and type of information that is being collected, and we are making a difference together. Thank you for choosing to be part of ADVANCE.

What's the last book you read? 'The Tombs of Atuan' by Ursula K. Le Guin. Highly recommend to all fantasy fans!

What's the weirdest habit you developed during lockdown? Consciously and unconsciously singing 'Happy Birthday' while washing my hands (you are supposed to wash your hands for the whole song!).

What's your favourite meal? Ceviche, and all Peruvian food (I am Peruvian).

What's your favourite drink? Inca Kola, a soft drink from Peru. It tastes like bubble gum or cream soda, and it seems to be a love or hate relationship. For me, it's just love.

What was no. 1 in the UK charts on the day you were born? 'Love Is All Around' by Wet Wet Wet. I did not know this song! I am more of a fan of #63, a cover of 'Smells Like Teen Spirit' by Abigail.

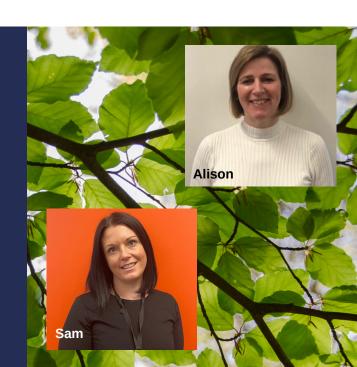
What three words would your friends or partner use to describe you? Funny, caring and persevering.

Hello and goodbye

In January we said goodbye to our wonderful research nurse Guy Fraser. We will miss him as, we are sure, will our participants. Good luck to Guy in his new adventures!

But it's not all teary goodbyes, as we have also welcomed new people to the ADVANCE team. Sam Paul, MRI radiographer started in February. She brings with her several years of radiography experience and will be working on the ADVANCE TBI study. So if you are taking part in the TBI study, you will have the pleasure of meeting Sam

A very warm welcome also to Alison Hever who joined ADVANCE as a study administrator in February. She brings with her a wealth of administration and communication experience. Alison will be contacting the ADVANCE participants to arrange their follow-up visits, so expect a friendly hello from her when you are next due in.



YOUR ADVANCE DAY EXPLAINED: Amputee Mobility Predictor (AMP)

All ADVANCE participants with lower limb amputations undergo some extra tests when they come to Stanford Hall for their ADVANCE visits. These tests are done mainly to assess the participants' mobility and how well they are able to perform certain functional movements. We use a tool called the Amputee Mobility Predictor (AMP) to do this.

The AMP is a quick and easy tool, and the tests involved take no more than 15 minutes to do. The tests are slightly different for people with prostheses (AMPPRO tests) and without prostheses (AMPnoPRO tests).



The things we look at with AMP include sitting ability, going from sitting to standing, standing ability and balance, and walking – at different speeds, over obstacles and up and down stairs. Each function is then scored, and the total score over all the tests is calculated and correlated to the AMP scoring system which has five bands, from K-Level 0 to K-Level 4. K-Level 0 corresponds to minimal mobility and not having the ability or potential to walk or transfer safely without assistance, and a prosthesis does not enhance quality of life or mobility. K-Level 4 corresponds to very good mobility and having the ability to move very well with a prosthesis.

The AMP is a reliable tool and has a good validity against other commonly used tests, such as a the 6-minute walk test and the Amputee Activity Survey. This means that the AMP can be used widely by different clinicians to get the same scores when testing patients.

As the ADVANCE participants return to Stanford Hall for their follow-up appointments, the AMP is a quick stock check to see how they are faring over the years. It's an easy assessment and can highlight any issues very quickly. The test leaves little place to hide, so we can see who has good technique with their prostheses (or not!) and how this changes over time. We are also able to look at differences in mobility between unilateral and bilateral amputees, and people with below knee and above knee amputations.







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We look forward to speaking to you soon!



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