

LOOKING FORWARD TO AN EXCITING 2021



LEAVING BEHIND THE HIGHS AND LOWS OF 2020

Well, what a year 2020 was! To say it was a strange year would be an understatement. We are glad to say goodbye to what we hope was the worst of the COVID-19 pandemic, but we should also celebrate the positives that the last year brought with it. ADVANCE finished baseline recruitment and completed baseline visits; we also published the ADVANCE protocol paper (you can read it [here](#)). We are working hard on preparing our preliminary findings paper and will let you know as soon as it's ready. As always, we are hugely grateful to our participants who have persevered with us through these difficult times. So thank you to each and every one of you for being patient and understanding through delayed study visits and the health and safety measures during your visits.

OUR DOORS ARE OPEN AGAIN!

The safety of our participants and staff comes first, and we therefore had to suspend follow-up visits over the last few months. Thankfully, our doors are now open again. We have all the necessary health and safety measures in place to ensure we follow government guidelines and that visits to ADVANCE are safe for you and our staff. For further details please check the [COVID-19 page](#) on our website.

WHAT WOULD YOU LIKE TO SEE IN THE NEWSLETTER?

We would love to hear your feedback. Please let us know your suggestions and comments on the newsletter using the contact details below.

Find us on
social media!



E-mail us at:

dmrc-advancestudyteam@mod.gov.uk

Call us on:

+44 (0)1509 251 500 extension 3408

Visit our website:

advancestudydmrc.org.uk



AND THE WINNER IS...

As promised in the Oct 2020 newsletter, the first ADVANCE prize draw was held on 14th October. As a thank-you for taking part in ADVANCE, we offered participants an entry into our prize draw, which will be running for the life of the study, with the value of the total prizes going up each visit from £1,000 to £8,000. The lucky winners of the first prize draw are (*drumroll*)... Michael Brash, Craig M Gadd, Stuart Little and Ben Zissman. Congrats to all the winners!

The top prize of £500 went to Stuart who has previously donated his ADVANCE thank-you money to purchase football kits for the Retford U9's team. Part of this prize money will be spent on similar causes, and Stuart is also donating to Sapper Support, a charity providing mental health support.

Pictured on the left, Gp Capt Alex Bennett - ADVANCE Study Chief Investigator - doing the prize draw.

PARTICIPANT VIEW: Simon Shirley

Name: Simon Shirley

Age: 49

Rank: Major

When and where were you last deployed? In 2008 in Afghanistan.

Why did you choose to take part in ADVANCE?

Partly because of self-interest for my own health review, but also important to get long-term information to improve rehabilitation services for the future.

How did you hear about ADVANCE?

Via e-mail from the ADVANCE recruitment team.

What was the best part of the ADVANCE day?

The comprehensive nature of testing and how it examined more than just one body region/system, looking at both mental and physical health. It was really reassuring that Stanford Hall offers such a good experience and supports rehabilitation.

What more would you like to see from the Study? When results are available, I would like to see any preliminary data findings in relation to the study outcomes and how this may change policies in the future for the serving personnel.

Is there any other follow-up after the ADVANCE visit you would like?

I was happy that all the information was provided on the day of my visit.

What three words would you use to give feedback on your ADVANCE visit? Improving medical services.

What are your interests/hobbies? Cycling and history.

What new skill would you like to learn? I'd like to improve my French.

What are your top film, song and book of all time? Film: Ice cold in Alex. Song: Sympathy for the Devil by the Rolling Stones. Book: Siege of Krishnapur by J.G Farrell.



Have your contact details changed?

Let us know by the contact details above or by completing our online Contact Form using this QR code:



TELL US HOW ADVANCE HAS HELPED YOU!

- Did your ADVANCE results flag up something that needed medical attention?
- Have you made lifestyle changes after your ADVANCE visit?
- Whatever it is, we would love to hear how ADVANCE has helped you. Let us know via the contact details on the first page.

MEET THE TEAM - DAN DYBALL

What is your role within ADVANCE?

I am a research assistant. This is something of a jack of all trades job. Do you need to contact a participant about their follow-up appointment? Do you need someone to code data? Do you need a coffee? I do all of those things. And it's the best damn coffee you've ever had.

What jobs have you done before joining ADVANCE?

I used to work in psychology. I was an assistant psychologist for around five years after university, then moved to research in 2015. Never looked back - research work is much more my bag.

What do you enjoy most about your job?

Getting into the data analysis and finding answers to important questions. It's very satisfying to say "look, this group is doing very well / aren't doing so well and it's because of this. Here's the numbers to prove it" and then have clinicians use that proof to amend their practice.

What are the biggest challenges of your job?

Military personnel, serving or veterans, do like to move around a lot. One minute you can be in London, then next you're in Somalia, or perhaps somewhere even more dangerous, like Glasgow. If you can spare a minute to think about poor research assistants all over the world and donate to us your most up-to-date contact details every now and again, we'd be eternally grateful.

If we could see all our participants together, what would you say to them?

"Who's buying the first round?"

What's your favourite meal?

Proper adult meal: Dim sum. Student meal: Plain spaghetti, vegetarian hotdogs, cheese and ketchup.



Dan in the pub about 48 years ago before the COVID-19 pandemic.

What's the last book you read?

Probably a statistics book or something science-y. Last fictional book was The Book of Dust by Phillip Pullman.

What's your favourite drink?

Moscow mule or espresso martini.

What do you enjoy doing in your spare time?

I cycle, break my bike, try to fix my bike, fail to fix my bike, buy new bike, repeat.

What was no. 1 in the UK charts on the day you were born?

I just can't stop loving you by Michael Jackson.

List three words that your friends or partner would use to describe you.

Utterly sarcastic b*****.

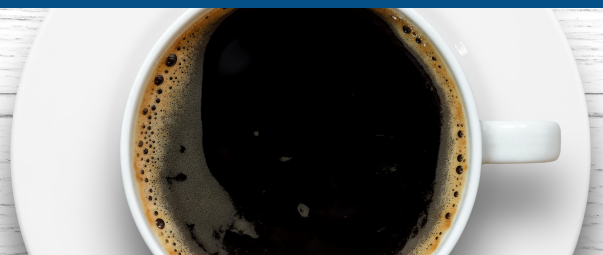
New year, new ADVANCE team members

Since the last newsletter, we have been lucky to welcome three new staff members to the ADVANCE Team: Anna Verey (left), Fearghal Behan (middle) and Howard Burdett (right). Anna is mainly responsible for recruiting participants, data entry and data analysis; Fearghal is a research associate and manages the ADVANCE musculoskeletal health data analysis; Howard is a research fellow and investigates socioeconomic outcomes for participants.



CALLING ALL BUSINESS OWNERS!

If you have your own business and would like to be featured in the ADVANCE newsletter, please give us a shout. (contact details on the first page)



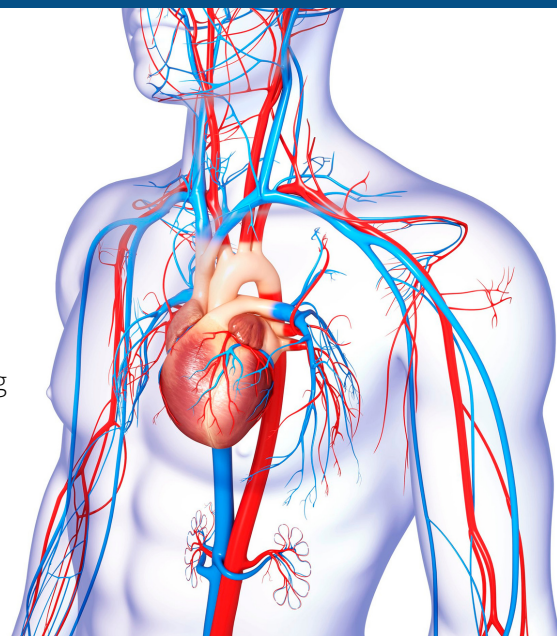
YOUR ADVANCE DAY EXPLAINED:

Cardiovascular tests

In every newsletter we are going to explain a section of the ADVANCE Study day in a bit more detail to help show what your visit is all about. In this newsletter we explain the assessments we do to measure your cardiovascular health. In particular, we are interested in looking at your risk of developing high blood pressure and diabetes which, if left untreated, can increase your risk of developing cardiovascular disease (CVD), such as heart disease and stroke, in the future.

What is the cardiovascular system?

'Cardiovascular' refers to the circulatory system - this is the heart and blood vessels. These carry oxygen and nutrients around the body and help remove carbon dioxide and waste products.



Why is it part of the ADVANCE Study day?

Over the 20-year study period we are investigating many factors that can have an impact on your cardiovascular health and whether sustaining battlefield injuries such as loss of limb(s) or gunshot injuries increases the risk of cardiovascular disease. To do this, we will compare the injured group to our non-injured group of similar age, rank, size etc..

What cardiovascular tests do we do?

Blood tests: We take blood samples from you during every visit. The tests that relate to CVD that we look at are **cholesterol**, **HbA1c** and **High Sensitivity Creatine Reactive Protein (HsCRP)**. Abnormal cholesterol levels (LDL, HDL and triglycerides), if left untreated, can develop into fatty deposits which can cause a narrowing of your blood vessels. This puts an increased pressure on your heart. **LDL** is considered 'bad' cholesterol, as over time it can cause fatty build-up in your arteries. **HDL** is your 'good' cholesterol, as it carries blood fats to your liver to be excreted. We also observe your total cholesterol/HDL ratio - a higher ratio indicates a higher risk of CVD. **HbA1c** tests the average amount of sugar that has been in your blood over the last several months. Previous research shows that an increased HbA1c carries an increased cardiovascular risk. **HsCRP** is a protein that indicates inflammation which, when raised, is associated with heart disease.

Vicorder: The aorta is your largest artery carrying oxygenated blood away from your heart. Vicorder measures whether the aorta is becoming stiff and inflexible - indications of potentially developing a high blood pressure. The Vicorder test is carried out by applying pressure cuffs to your thigh, arm and neck. This gives an in-depth measurement of your blood pressure and heart rate. It also measures the speed of blood flow from your neck (carotid artery) to your thigh (femoral artery).

Heart Rate Variability: Heart rate variability is a measure of variation between heart beats. This test is carried out by recording a resting 5-minute electrocardiogram (ECG), followed by a 5-minute paced breathing ECG. The heart rate variability test identifies the effectiveness of your autonomic nervous system and gives some indication of your fitness levels and cardiovascular health.

Waist-to-hip ratio: We also carry out waist and hip measurements during every participant visit. This is done to find out if the waist-to-hip ratio is connected to an increased health risk and increased blood cholesterol levels.

We review all of the above results, and if there are any concerns we inform you and your MO or GP. We also provide advice which, in most cases, will be on healthy lifestyle choices, and monitoring your blood pressure or doing follow-up blood tests.

Some of the above measurements can be fed into a QRisk calculator which helps identify those most at risk of heart disease and stroke. You can access the calculator here: qrisk.org/2017/.

Presenting to the CASEVAC Club



Gp Capt Alex Bennett, the ADVANCE Study Chief Investigator, was honoured to present some early results from the Study to the CASEVAC Club members in November. It was a pleasure to see so many of the CASEVAC members on the screen. Thank you for the warm reception and for having us there to share ADVANCE findings!

THE FUNDERS ENABLING THE ADVANCE STUDY

The ADVANCE Study would not be possible without the generous donations from our funders, as listed below. The Study is funded through the ADVANCE Charity. The Charity's Trustees, along with all of us at ADVANCE, would like to thank our funders for enabling this important study.

- The Headley Court Charity (the principal funder)
- A direct LIBOR grant from the Chancellor of the Exchequer
- Help for Heroes
- Nuffield Trust for the Forces of the Crown
- Forces in Mind Trust (FiMT), and The National Lottery Community Fund
- Blesma - The Limbless Veterans
- The UK Ministry of Defence

THE **NUFFIELD** TRUST
for the Forces of the Crown

Supporting the men and women of our Armed Forces

SUPPORTED BY

HELP for
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**HEADLEY COURT
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Blesma
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FiMT
forces in mind trust
**COMMUNITY
FUND**

A new ADVANCE 'bolt-on' study exploring military to civilian transition of combat veterans



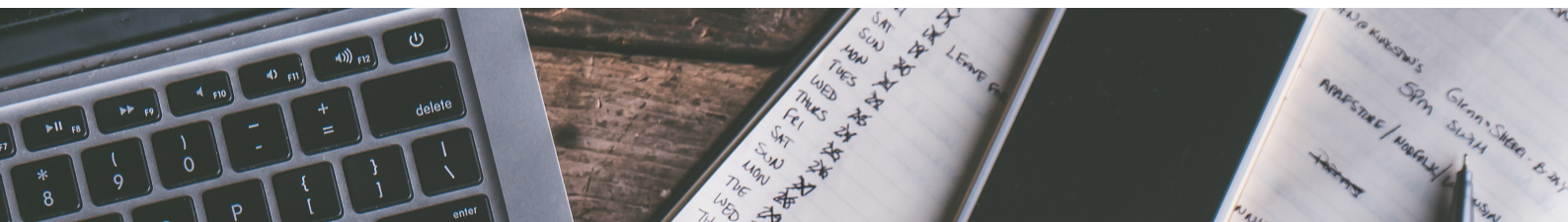
We are delighted to let you know that the ADVANCE Study has recently received funding from FiMT for a new 5-year project to explore military to civilian transition experiences of the ADVANCE cohort.

This work will be done at King's College London, led by Professor Nicola Fear who is the King's College lead for ADVANCE. Her team have been involved in the ADVANCE Study since the very beginning and are excited to be leading this additional project focusing on transition.

We spoke to Professor Fear who said: 'The findings from this work will provide evidence to understand how service personnel who have experienced physical injuries as a result of their deployment manage after leaving the military community and the influences on their longer term health and wellbeing'.

We look forward to seeing the positive impact this project will have on the lives of our servicemen and their families.

We look forward to speaking to you soon!



E-mail us at:

dmrc-advancestudyteam@mod.gov.uk

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