



**@30 clinic.
Have you done
yours yet?**

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Kyle Sinckler, England & Bristol Bears player visiting our clinic

Your Life in Science

Newsletter 2023



@30 clinic update

We need you!

Our @30 clinic started in September 2021 and is our biggest yet: including our original participants, their parents and their children too.

We've loved seeing so many of you come in, but we need another 2,500 visits to reach our targets.

From January to April, our clinic will just focus on seeing participants in their 30s. Original parents, please encourage your 30-somethings to take part if you can! More appointments for parents will be available to book after May.

Please note, if you have recently been to our clinic (in the past two years) then you've already done your @30 visit, so there's no need to contact us.

We'd love you to encourage any of your friends and family who haven't been yet to now book their appointment. Remember if they don't want to do everything, they don't need to, as it

is all voluntary. Children are also very welcome to come along, so please don't let childcare put you off coming. This is your chance to continue to make a difference to health science - it doesn't matter if you haven't taken part for years.

You'll get £40 to say thanks

Every single visit matters because the more data we have, the more valuable it is to researchers.

Haven't got the time? We're now also offering shorter virtual or home visits to make it even easier to take part!

The @30 clinic will continue until mid-2024. It's really easy to book. Follow the links in your email or contact us:

visits@childrenofthe90s.ac.uk
or ring 0117 331 0011.

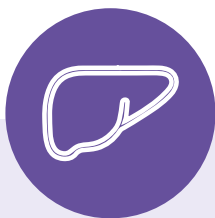
"My children - aged 6 months and 2 years - my Mum & I visited Children of the 90s all on the same day! The staff were so friendly and accommodating to us. It's amazing to be a part of such a renowned study that has been going for so many years and now my children can continue that research."

Shay, her mum Tanya and children Tommy and Elsie



7,000+

appointments
complete



2,398

liver
scans



3,000

children
seen



We now offer home visits!

- The appointment takes one hour
- We can come almost anywhere within the UK
- We can visit all your family at once
- You'll get £20 to say thanks



Our partnership with Bristol Bears

This pioneering new research is looking at the association between body composition and injury in elite and academy rugby union players. The Bristol Bears are coming for visits throughout this rugby season and being scanned using our state-of-the-art DXA scanner – a machine many of you will be familiar with from clinic visits over the years!

Some of the players also had a go at our hand-grip test – one of our @30 clinic measures.



“As an original child of the study, it’s been amazing to have this collaboration. The

DXA scan has offered valuable insight as to where I can improve and what impact it can have on my performance.”

Amber Reed, Bristol Bears and England player



“The staff are excellent, very accommodating and efficient. The information about my bone density was really useful!”

Kyle Sinckler,
Bristol Bears and
England player.



“It’s really beneficial for us lads to find out more about our bodies.”

Matthew Jones,
Bristol Bears
player



Meet Laura, a Children of the 90s participant

“ My mum is an original parent, and I've been part of the study my whole life.

Coming to the clinic was always such a fun day. I got some time off school, did lots of exciting activities and got a chocolate bar in the break! A highlight was also getting the little yellow 'Stretchy Gene' to take home at the end of the day.

I feel incredibly proud to be part of the study and know that I'm contributing to amazing research which has literally changed people lives.

Even as an adult I still love going to the clinics and getting to take part in the different activities! It's a fun day, you get a bit of a health check-up, and you know it's supporting a great cause. The staff are so lovely as well and do everything they can to make it as easy and accommodating as possible. ”

To find out more about @30 and book your appointment visit childrenofthe90s.ac.uk



Our research

Vaping

Dr Jasmine Khouja

Whilst it's widely agreed that e-cigarettes can be helpful for people who want to stop smoking, the rise in the use of vapes has led to questions around the effects on our bodies and health. And yet, little is known about the long-term impacts of vaping, which is where a new study led by

Dr Jasmine Khouja from the University of Bristol comes in.

Using data from our participants, as well as the wider community, the team are looking for genes which influence how likely someone is to vape or not. This information can then be used in future studies to look at how vaping might impact health.

In previous studies it has been difficult to determine which genes are specifically associated with vaping rather than smoking cigarettes because most e-cigarette users have also smoked tobacco.

Thanks to the wealth of data we hold, researchers are now able to look at young people taking up vaping who have never smoked before.



Menopause & your genes

Professor Anna Murray

Menopausal symptoms such as hot flushes, brain fog and poor sleep affect around 70% of women, and for 10% of those, they can last for at least ten years. However it's not clear how different symptoms might be linked and who is at risk of developing them.

A team from the University of Exeter led by Professor Anna Murray is using Children of the 90s data (alongside other studies) to look at how our genes might influence symptoms of menopause.

Professor Murray explained:

"At the moment, the best treatment for menopause symptoms is hormone replacement therapy (HRT). Whilst there's no doubt it's a good treatment, relieving many of the symptoms, some women cannot take HRT and others don't want to. We are in need of a new treatment for menopause symptoms.

"Our latest study investigates whether different menopausal symptoms are related to each other or whether they have separate causes. It is hoped this might in future help find new potential drug targets to treat menopausal symptoms."



The team are using genomics – the study of a person's entire set of genes, including interactions of those genes with each other and the environment - to find the causes of a range of menopausal symptoms including: hot flushes, sleep disturbance, mood changes and sexual dysfunction.

They have developed a new questionnaire for participants to collect information about these symptoms, which will be combined with genomic data previously collected.

Professor Murray said:

"I'm really optimistic we'll be able to find a new genetic link to menopausal symptoms. The initial focus will be on one of the most common, hot flushes."



Watch Professor Anna Murray talking about her research at our Discovery Day

bit.ly/CO90sdiscoveryday



Our Discovery Day

In October hundreds of our participants got together for the first time in 10 years!

Hosted by television presenter Ali Vowles, our Discovery Day at M Shed included a Q&A with our founder Professor Jean Golding and Principal Investigator Professor Nic Timpson.

"What a fabulous day working with Children of the 90s and its founder Professor Jean Golding OBE. So many Bristol families have taken part in this amazing study over the past 30+ years and it remains the biggest study of its kind in the world. So pleased to be involved! And I met the loveliest people!"

Ali Vowles
television reporter & presenter



Professor Jean Golding with Ali Vowles

We had interactive stands where people could learn all about our @30 clinic, meet the team and compare their grip strength to some of the Bristol Bears players!



Face painting by Kaitlin Wade



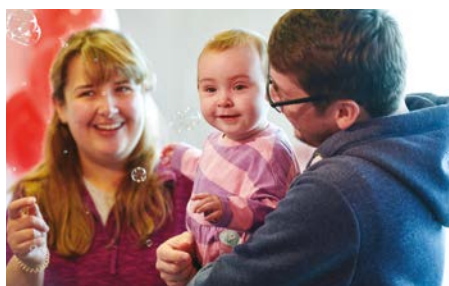
Three generations of the same family try the grip strength test



Clinic administrator Amy and senior clinic practitioner Juliet



Principal Investigator Professor Nic Timpson



A family enjoy the day



Professor Jean Golding with some of our Children of the Children of the 90s!

Watch the researcher talks



Catch up on recordings of all the researcher talks from the day on our website:

bit.ly/CO90sdiscoveryday
or scan the QR code.

- Principal Investigator
Professor Nic Timpson
- Professor Anna Murray,
University of Exeter -
Menopause and your genes
- Dr Caroline Taylor, University
of Bristol – **Picky eating and
your family**
- Professor Rebecca Pearson,
Manchester Metropolitan University
– **Mental health and family relations**



Machine learning and mental health in parents

What if machine learning could be used to accurately predict the mental health of new parents, potentially supporting them at times of stress?

This is exactly what a research team from the University of Bristol and Manchester Metropolitan University are looking into, using data collected from our youngest participants, the Children of the Children of the 90s.

In an innovative new study, which was recently published in the scientific journal *Frontiers*, they used head cameras worn by babies and caregivers to record videos of their interactions both at home and in our clinic.

The team compared an automated facial coding system to analysis of the face and expression by human coders, to ascertain the accuracy of the software.

Lead author Romana Burgess is a PhD engineering student at the University of Bristol. She explained:

“Using computers to detect facial data can be very accurate when the conditions are optimal. Using wearable headcams means we can uncover details that were previously hidden from the human eye, changing how we understand parents’ real emotions during interactions with their babies.”

Now the team plan to explore the use of automated facial coding in participant’s homes as a tool to understand mood and mental health. This will help to pioneer a new era of health monitoring, bringing innovative science directly into the home.



Meet Jane, an original study mother




Jane, from Somerset, is one of our original mothers, having been approached to take part in Southmead Hospital just after she'd had her son Kieran. Over the years they have visited our clinics and answered numerous questionnaires, adding to our growing bank of health data.

Now, they both work for the Ambulance Service, sometimes as a team on the same shift!

"We feel we really are contributing to the study and future generations. Kieran enjoyed the different tasks at the study days when he was younger and liked having days off school to attend!"

I'm very proud of Kieran following in my footsteps at work, I have been in the



Ambulance Service for 39 years now and Kieran has been for 6, and he's also taking his paramedic degree.

The staff at Children of the 90s are always friendly and accommodating making it easy to attend the study days and we enjoy taking part."

You can come back to Children of the 90s even if you've not done anything for a while, and do as little or as much as you'd like! If it's been a long time since you were last involved you will get a £20 voucher too!

Please visit:

childrenofthe90s.ac.uk/get_in_touch
or text your name and date of birth to:
07772 90 90 90



New Research

Climate change and our health

Dr Eunice Lo from the Cabot Institute at the University of Bristol is interested in the impact of climate on human health. Her work has a focus on extreme weather events such as heatwaves and cold spells. Through her research, she is looking at how these changes could in turn lead to illness and even death.

Dr Lo explained: "Extreme heat (above 40°C heat) is becoming more and more commonplace in the UK meaning overheating in homes and buildings is a key risk. It is important to understand how this affects people's physical and mental health, wellbeing and behaviour during heatwaves so that strategies can

be developed to help people adapt."

Most research in the UK related to heat and health is focused on outdoor temperatures and population-scale health outcomes e.g. mortality in South-West England rather than people's experiences and perceptions of heat, which varies between individuals and the buildings they live in. This study is happening in conjunction with the Elizabeth Blackwell Institute.

"We recently sent Children of the 90s a questionnaire to ask participants about their experience and behaviour during extreme weather."

The importance of high blood pressure across the generations

We know that children born to hypertensive pregnancies (when the mother has high blood pressure) are at increased risk of heart disease in later life. Some participants are being invited to take part in a study at the University of Oxford called CLARITY. The research will help us understand more about how changes in your blood vessels, heart and brain develop.

Project manager Dr Katie Suriano gave an update on the study:

"To date, the CLARITY team have seen over 60 Children of the 90s participants at the University of Oxford clinic. Participants take part in a range of cardiovascular assessments such as echocardiography (ECG), MRI scans, blood pressure measurement, ultrasound and exercise testing."

The team are still recruiting through 2024, and you will be emailed an invite to take part if eligible.

They hope this study will eventually lead to the development of new ways to prevent early onset heart and blood vessel disease.

A new study looking at birth cohorts

Researchers from the anthropology department of UCL have embarked on an exciting new study taking a deep dive inside the workings of birth cohort studies.

Led by Professor Sahra Gibbon, the work will look at Children of the 90s together with similar studies based in Brazil and Portugal.

The aim is to look at how multi-disciplinary teams work with each other, and to understand how social scientists can play a more prominent role in the design and implementation of studies such as ours.



"I had a really enjoyable day at the CLARITY study, it's always useful to know that my heart is still functioning and get some very cool pictures of my brain!"

Study participant



We're listening to you

As our participants, you are the lifeblood of the study. It's thanks to your continued support, answering questionnaires and coming in for clinic visits, that so many researchers from around the world are able to answer important questions about health and society. We're always striving to ensure that you're happy with what we do, and your views matter.

This year is an important year for the study as we have started planning how the next 5 years (and beyond!) will look.

That's why we sent out a short survey to get your ideas about the future, and what we could be doing better. We also asked everyone who came to our Discovery Day to tell us too.

We're always keen to hear your views – please do get in touch by emailing **info@childrenofthe90s.ac.uk**

80%

of respondents were 'very likely' to complete our questionnaires

60%

of respondents would take part in studies using wearable technology such as a fit-bit

60%

of respondents would like clinics nearer their home

"It's really exciting to feel connected to the research and to the projects globally, as well as everyone here. It's also really cool to see the facts coming out of the studies and the connections that are being made."

Sophie – original study participant



Topics which are 'very important' for us to study:



Healthcare



Family



Physical
Health



Mental
Health



Health
inequality



Dementia



Dental Care



Nutrition

Why do you take part?

94%

I feel I am making
a difference

53%

I like getting a
health check

41%

the shopping
voucher

Hello there!

It's been another busy year for us here at Children of the 90s! Alongside our @30 clinic we've been working on many different studies and planning the next 5+ years.

You and your family are part of a scientific resource like no other in the world – having an impact on new science and enabling a greater understanding of health and wellbeing.

It always amazes me when I hear the numbers. We have got almost 100,000 pieces of information about your health, lifestyle and wellbeing. This longitudinal data is a treasure trove for research and generates important health findings each year.

If you can, do take a moment to watch our short Discovery Day films. They explain some really interesting things such as what we've learned about picky eating, depression in pregnancy and menopause.

Visit bit.ly/CO90sdiscoveryday

We are about to send out a final invite to everyone who hasn't yet been to our @30 clinic. Thousands of you have attended – thank you! - but we still

Get back in touch

To get back in touch simply send your full name and date of birth to:

✉ info@childrenofthe90s.ac.uk

☎ 07772 909090

Perhaps you have a friend or family member who used to be part of the study – be sure to share this with them too!

If you've not done anything for a while, you could get £20 to say thanks.



need lots more of you to come before it finishes next year.

If a 3-hour clinic is too difficult for you, please talk to us! We can arrange shorter clinics now, and home visits too.

This is a really important clinic for us, involving the whole study, so please don't miss out. There's no one like you, and your unique data really matters.

Thanks for keeping the study alive. Wishing you a very happy, healthy festive period!

Professor Nic Timpson

**Principal Investigator,
Children of the 90s**

Say hi on social media!

If you'd like to keep up to date on all our latest news, research and findings – plus the odd trip down memory lane – then come and join us on social media.

Join in the conversation
and keep up to date:



Children of The 90s



@co90s



@children_of_the_90s

