

Nuffield Research Placements



Experience research in action

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It's not all about white coats

Go further with science, technology, engineering or maths

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Kai Diep

Kai gets hooked on all things tech at the Open University

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Get the knowledge



“The Nuffield Research Placement was one of the best things I have done. Although my project was mentally challenging, it did not feel like work because I enjoyed it so much.”

*Sethu Jayakumar, Chelmsford County High School
Royal Free Hospital*

What are you doing this summer?

You could spend your holiday working with scientists, technologists, engineers or mathematicians on a research project in your area.

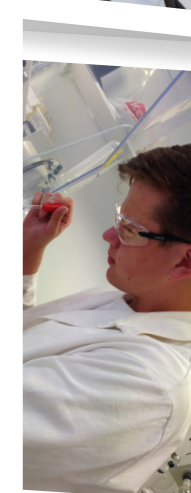
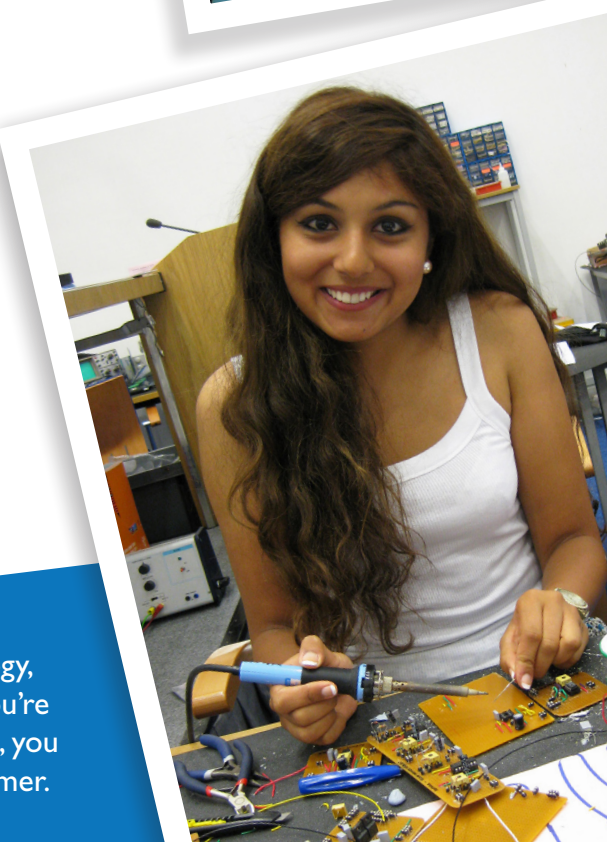
You'll get **hands-on experience** of a professional research environment and a **valuable insight** into the sorts of careers available to you. You'll **meet new people** and **learn loads of new skills** which will help with whatever you choose to do next, whether that's a university application, a job or further training.

You don't need to know what you are going to study at university or what you want to do as a career.

A passion for any area of **science, technology, engineering or maths** is a good start: a research placement can help you decide if you want to take it further.

What's more, **it won't cost you anything**. If you have to pay to travel to your placement then you'll get that money back and, depending on your family circumstances, you may be eligible to receive a bursary of £80 for each week of the placement. Your local coordinator will tell you whether you are eligible.

STEM stands for science, technology, engineering and mathematics. If you're interested in any of these subjects, you could be in for an interesting summer.



Not your average holiday job

We can arrange a four to six week research placement in a university, research institute or company.

You won't just be making the tea. Unlike other work experience placements and summer jobs, you'll have **responsibility** for your own research project. With **expert supervision**, you'll work on a project that will be useful to professional scientists, engineers, technologists or mathematicians.

You'll write a project report, receive a certificate of achievement, and have plenty to tell your friends when you get back to school.

You'll get **valuable experience** of teamwork, interviews, presentations and report writing.

You will also get the chance to enter your project for a British Science Association CREST Award, and could attend regional, national and international science fairs - giving you the chance of being named UK Young Scientist or Engineer of the Year.

- Learn new skills
- Make a difference
- Try out STEM careers
- Meet people like you



Could it be you?

- ✓ Are you over 16 and in the first year of post-16 studies?
- ✓ Are you getting good results so far?
- ✓ Did you gain at least 5 A* - B grade GCSEs, including maths, English and a science?
- ✓ Do you want to pursue STEM-related subjects at university or as a career option?
- ✓ Are you studying for AS-levels, BTEC, Scottish Highers, or the International Baccalaureate?
- ✓ Do you want to carry out experiments and solve research problems?
- ✓ Are you studying science, technology, engineering or maths?
- ✓ Are you up for an exciting challenge?

If you've answered yes to most or all of these questions, we'd love to hear from you.

Your local coordinator will arrange a placement that suits your interests and abilities. Turn to page 11 to find out how to apply.



"One thing has led to another. I have built up contacts in industry, learnt so much about the environment and been awarded some amazing prizes."

Stephanie Tudgy
Farnborough Sixth Form College, QinetiQ

Could your workplace provide a placement for a student?

Nuffield Research Placements can link your organisation with a motivated, enthusiastic student.

Visit www.nuffieldfoundation.org/nrp to find out more.

It's not all about white coats...

Play all day as a **games developer**. Save the world as a **climate scientist**. Hang out with bands as a **radio producer**. Work with star athletes as a **sports technologist**. Pick apart the action as a **crime scene investigator**. Make your mark on the world as a **structural engineer**. Get the dance floor moving as a **lighting technician**. Go into the deep as a **marine biologist**. Change lives as a **neuroscientist**. See stars as an **astronaut**.

A STEM qualification could take you further, faster.

There is a huge demand for skilled workers with STEM qualifications. Some of the most exciting industries in the world are recruiting women and men from all backgrounds into world-changing careers and they pay well. With a STEM qualification and the right experience under your belt, you could be in demand.

“It was exciting to experience what ‘science’ really is. The enthusiasm of brilliant scientists who were passionate about their research was inspiring.”

Kate Champion, Impington Sixth Form College, Babraham Institute

CASE STUDY

Kai Diep

Kai Diep, 17, from Oakgrove School, did a placement at the Open University.

I was thinking about studying science or engineering at university and thought that doing a research placement in either area was a good way for me to decide on a career path. My project addressed the addition of Computing into the UK National Curriculum. I developed computer hardware and teaching resources to help tutors instruct school children about basic programming and electronics.

On my first day of the placement, my supervisor went over the aims and objectives of the project so I knew exactly what I would be doing. Throughout the process he helped me resolve any programming issues I encountered. I got to use industry-standard hardware such as Arduino and Raspberry Pi. The experience greatly expanded my knowledge of C++ and Python programming languages.

After finishing my placement, I entered the National Science + Engineering Competition and reached the finals at the Big Bang Fair where I won the Google Creative Tech award.

By presenting my project report and research findings at the Big Bang, I was able to visit STEM-related organisations and talk to industry experts which gave me a great insight into my career options.

My research project definitely helped me narrow down my university degree choices. Before I went on the placement, I was interested in studying chemistry. However, I have since changed my mind and chosen to study computer science instead. I have received offers from several top universities as a result of talking about my research experience with admissions tutors.



CASE STUDY

Rachel Ayers

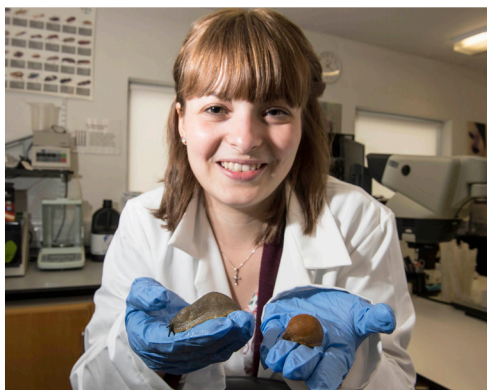
Rachel Ayers, 17, from Notre Dame High School, did a placement at the Norwich Research Park.

My project involved research into the ecological impact of Spanish slugs within a range of UK environments. As part of the placement I helped create materials for the citizen science initiative 'SlugWatch', which aims to involve the general public in monitoring the populations of various species across the country. I knew very little about slugs before starting but I gained a huge amount of knowledge about their biology over the course of the placement. I also learnt about how researchers use science outreach projects as a means of communicating their research to the public.

The work I carried out really helped me with my university applications, as it was something that I could talk about in my personal statement. Having finished my research placement I was able to obtain my CREST Gold Award which is the only STEM award endorsed by UCAS.

“My supervisors were really supportive and helpful.”

My Nuffield Research Placement was one of the best things I've ever done, so I would thoroughly recommend the programme to anyone considering applying - you have nothing to lose and so much to gain! The experience you gain will be extremely valuable and a placement is a great way to get a taste of working in the real world.



CASE STUDY

Quincy Okeke

Quincy Okeke, 18, from King Edward VI Aston School, did a placement at Coventry University.

I like maths and economics and am keen on going to university after finishing my A-levels. I didn't have any plans for the summer holidays, so the opportunity to learn about research in the real world, while doing something useful, was really exciting!

During my placement I worked on identifying patterns in the annual fluctuation of the UK's Gross Domestic Product. I used statistical techniques to analyse data which I obtained from journal articles and online databases. Before I started, my supervisor explained the purpose of the project and showed me how to use Visual Basic for Applications to create modelling programmes in Excel. We had regular meetings to check how things were going so I always felt supported.

When I first applied I thought I'd be wearing a white coat and carrying out experiments all day. However, when I realised that I'd be doing a data science project, I was really happy. The experience was fantastic and my supervisor tailored the project to suit my specific interests in finance and economics.



“You don't have to be in a white coat all day to carry out research.”

The knowledge

Which subjects should I be studying?

You need to be in your first year of post-16 studies; this includes A-levels, AS-levels, BTEC, Access Diplomas, Scottish Highers and the International Baccalaureate. Placements are available in all areas of science, engineering, technology and maths, so you must be studying at least one related subject.

What happens if I am awarded a Nuffield Research Placement?

You will work with a scientist, technologist, engineer or mathematician who will be your supervisor. Your supervisor will explain what the project involves, the contribution your work will make and what you might aim for. He or she will teach you any new techniques that you might need but the idea is that you learn by doing things for yourself.

What sort of projects could I work on?

Past projects have involved asteroids, lasers, bottlenose dolphins and everything in between. If you're interested in it, we'll do our best to find you a project; if you're not sure what you're interested in, we'll help you find out. There are plenty of case studies on our website to give you an idea of what a research placement is like.

How long will the project last?

Projects run for at least four and up to six weeks and take place during the summer holidays.

Where will the placement be?

Projects take place in universities, research institutes and companies. Your local coordinator will do their best to find a placement close to where you live. The research area may not exactly match your preferences but the experience you gain will be extremely valuable.

Will it cost me anything?

No, it won't cost you a penny. If you have to pay to travel to your placement then you'll get that money back. Depending on your family circumstances, you may be eligible to receive a bursary of £80 for each week of the placement. Your local coordinator can tell you whether you are eligible or not.

How will the placement benefit me?

Your placement will teach you a lot about your chosen subject and about the world of work. Talking about your placement will help with university and job applications and may help you to decide what career you want to go into.

What do I do now?

STEP 1: Look at our website

Visit www.nuffieldfoundation.org/nrp to find out more about the benefits of a Nuffield Research Placement and to decide whether to apply.

STEP 2: Check at home

Make sure you will be able to set aside four to six weeks in July and August for a placement without it clashing with holidays or other arrangements.

STEP 3: Talk to your teacher

Tell your teacher you are interested in applying and ask if they can write a reference for you. Think about what subjects you are interested in and would like to learn more about.

STEP 4: Get in touch with your regional coordinator

The coordinator will be able to talk you through the application process and the sort of project you might do.

STEP 5: Prepare your application

Register and complete the online application form, describing why you are interested in the placement and how it will benefit you.

STEP 6: Submit your online application



Your regional coordinator is:

"I feel that this project has prepared me for life after school in a way that my school never could. I would suggest to anyone who has the opportunity to take full advantage of this life-changing experience."

Katie Forbes,
Kinworth Academy, Marine Scotland

Inspiring students with over 1,000 funded projects each year.

Contact your Nuffield coordinator for details on how to apply.
For more information see www.nuffieldfoundation.org/nrp

About us

The Nuffield Foundation is a charitable trust established in 1943 by William Morris, Lord Nuffield, the founder of Morris Motors.

Our aim is to improve social well-being by funding research and innovation in education and social policy. We also work to build capacity in science and social science research.

We believe policy and practice should be influenced by independent and rigorous evidence. Nuffield Research Placements aim to ensure these qualities are maintained in the future by investing in young people's careers in science and research.

You can find out more at www.nuffieldfoundation.org/nrp

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