

# EPSRC CDT in Nanoscience and Nanotechnology (NanoDTC)

# **Applicant Guidelines**

## NanoFutures Scholars Undergraduate Research Programme 2023

10th July 2023 - 1st September 2023

This document provides details on how to apply to the NanoDTC NanoFutures Scholars undergraduate research programme. Please read these guidelines carefully before making your application.

#### 1. Application Method

You must apply to this programme via the online form linked to from the NanoFutures Scholars webpage. We will not consider applications which are submitted to us via any other means.

### 2. Eligibility

You are eligible to apply if you satisfy the following essential conditions:

- You must be studying for an undergraduate degree—a bachelors or integrated masters at a UK higher education institution which could plausibly lead to postgraduate studies in chemistry, physics, materials, engineering, or a related subject. Those studying a life sciences degree are not eligible but are encouraged to consider applying to the <a href="Experience-Postgrad Life Sciences">Experience-Postgrad Life Sciences</a> programme;
- You must have at least one year left of your undergraduate degree, i.e. still be studying your undergraduate degree in academic year 2023-24;
- You have, or expect to have before the 10<sup>th</sup> July 2023, the right to live and work in the UK, with no restrictions on how long you can stay;
- You are available to participate in all elements of the programme from Monday 10<sup>th</sup> July 2023 to Friday 1<sup>st</sup> Sep 2023, including those compulsory elements that take place during normal working hours (usually 9am to 6pm, but these may vary according to research group) and those optional, but strongly recommended, extracurricular activities which may take place outside those hours. Note that you may be asked to arrive during the weekend

of the 8<sup>th</sup> July 2023. There may be some limited flexibility in the dates of participation for successful candidates agreed, in advance, on a case-by-case basis with the programme organisers;

 You consent to abide by the terms and conditions of the offer, should you be made one, and commit to providing all requested feedback within one month of the close of the programme.

#### 3. Selection Criteria

The aim of the NanoDTC's NanoFutures Scholars programme is to find and support those undergraduate students who have the potential to become the future of nanoscience and nanotechnology research—a future which we are striving to make more diverse and inclusive.

Eligible applicants will be selected according to the following criteria:

- Opportunity: This refers to the extent to which applicants will benefit from the
  programme, given their previous educational experiences. Preference will be given to
  students who have not already had the opportunity to undertake research in relevant
  areas (see Research Experience section below). All else being equal, preference will
  be given to those entering the final year of their degree.
- Interest: The interest and/or excitement which candidates express about nanoscience and nanotechnology in particular, and scientific research—such as will be encountered in the internship project—more generally. Candidates can explore NanoDTC-related research here: https://www.nanodtc.cam.ac.uk/research/
- Academic Achievement and Potential: This will be evaluated through the candidates' application form, university transcript, a reference (if the candidate chooses to provide one in addition to their transcript), and the interview. Applicants would ideally be on track to achieve a final undergraduate degree grade of a strong 2:1 or first-class degree (e.g. if your transcript shows year-on-year grade progression towards the upper range of a 2:1 or above). Preference will be given to students who have performed well academically within the context of their education to date. Candidates should be aware that the University of Cambridge, along with most other research-intensive UK universities, normally expects a minimum of a good 2:1 as an entry requirement for postgraduate study. The NanoDTC PhD programme, as a highly competitive programme, normally expects a first-class degree from those studying a four-year undergraduate course.

In addition, in order to widen participation and to tackle the underrepresentation of—and overcome the disadvantage experienced by—certain groups in the physical sciences and engineering at Cambridge, priority will be given to those applicants who have not already studied at either Oxford or Cambridge *and* who satisfy one or more of the following criteria:

- have received free school meals;
- entered university at undergraduate level from a Care background or a Foyer resident;
- are estranged from their family;
- have been a single parent, or lone guardian of a young person who is aged under 18 and/or still in full-time education during their undergraduate degree course;
- have caring responsibilities for an ill or disabled family member who could not manage without this help;
- were the first generation of their family to go to university.

We also particularly encourage applications from those who:

- at the time of applying for their undergraduate course, were living in one of the most deprived areas of the country;
- at the time of applying for their undergraduate course, were living in an area where it is unusual for young people to go to university;
- identify as belonging to an underrepresented ethnic group and/or gender in the physical sciences and engineering at Cambridge;
- are a mature student;
- have received full state support for maintenance for their course of undergraduate study;
- have refugee status.

For more information on the above criteria and whether or not you may satisfy them, see the *Widening Participation Criteria* section below.

#### 4. Application Dates

- The application deadline: 12 noon, Friday 27<sup>th</sup> January 2023
- Virtual open day and interviews: week commencing 6<sup>th</sup> March 2023 (TBC)

The programme will operate a short waiting list in case any selected candidates are unable to take up their place. We will inform you if you are on the waiting list.

#### 5. Accommodation and Pay

Participants on the programme will be paid the Cambridge Living Wage (currently £10.90 per hour), for a 37.5-hour week. The programme duration is 8 weeks of full-time work, and you must participate for the full 8 weeks.

Participants will be provided, free of charge, with single accommodation at Selwyn College for the duration of the programme including weekends. Rooms will be allocated at random unless a student has specific needs (which you are invited to set out in the *Accessibility* section of the online form). You are expected to live in this accommodation for the duration of the programme other than in exceptional circumstances agreed with your NanoFutures programme tutor, and are expected to comply with College regulations whilst you are resident at the College.

The programme will also include a number of additional events (such as career talks, presentations, and social events) which will take place outside normal working hours. You are strongly encouraged to attend them as part of your career- and cohort-development.

# 6. Reference

If you choose to additionally evidence your academic achievement and potential through a referee, you should select a referee who is either a tutor or other academic at your current institution who knows you and your work well. This referee will be contacted when you submit your application. We strongly advise that you ensure your referee is happy to provide a reference **before** you submit your application.

#### 7. Research Experience

Please indicate if you have undertaken a research placement, work experience in a research laboratory, either at your current institution (whether as part of, or outside of, your course) or through another organisation, or research project of any other kind for a total duration of 2 weeks or more.

## 8. Widening Participation Criteria

Please indicate whether you satisfy any of the widening participation criteria (listed above) by selecting the appropriate criteria on the application form. The corresponding question on the application form, as well as further details, where applicable, can be found in the table below.

If you are shortlisted, we may contact you to request evidence to support the widening participation criteria you have selected. This ensures transparency in our assessment processes and fairness for all. Acceptable evidence is set out in the table below. We recommend, but do not require, that you prepare your evidence in advance of applying.

Criteria	Question, Further Details and Evidence
	Question: Were you eligible for Free School Meals at secondary
Free School Meals	school?
	Evidence: Letter or other notification from your school confirming
	this.
Care or Foyer	Question: Did you enter university at undergraduate level from a
Background	Care background or as a Foyer resident?
Background	
	Evidence: A letter from the Local Authority or Foyer confirming this.
	Question: Do you consider yourself estranged from your
	parents/guardians? Someone under the age of 25 who is not
	communicating with their parents/guardians due to a breakdown in
Estranged from	their relationships. You may also have been assessed as
Family	independent by Student Finance during your undergraduate study.
	Evidence: Name, title, and contact details of a non-academic
	referee who can speak to your situation.*
	Question: Are you (or have you been) a single parent, lone foster
	parent, or lone guardian of a young person who is aged under 18
Single Parent or	and/or still in full-time education during your undergraduate degree
Guardian	course?
	Evidence: Name, title, and contact details of a non-academic
	referee who can speak to your situation.*
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	Question: Do you (or did you) have caring responsibilities for an ill
Continue	or disabled family member who could not manage without this
Caring	help?
Responsibilities	
	Evidence: Name, title, and contact details of a non-academic
	referee who can speak to your situation.*
	Question: Are you in the first generation of your family to go to
First Generation	university?
Applicant	
	Evidence: Name, title, and contact details of a non-academic
	referee who can speak to your situation.*
	Question: When you applied for your undergraduate course, were
	you living in one of the most deprived areas of the country?
	Further Details: Please check the relevant government Index of
	Multiple Deprivation (IMD) search tool: England, Scotland, Wales,
	and Northern Ireland if your postcode at point of entry to
	undergraduate study ranks within one of the 50% most deprived
	neighbourhoods (i.e. within deciles 1-5 or an IMD ranking of 16,250
	or less on England's IMD).
	,
When You live I	Evidence: Evidence of your postcode at point of entry.
Where You Lived	
	and
	Question: When you applied for your undergraduate course, were
	you living in an area where it is unusual for young people to go to
	university?
	Further Details: Please check on the POLAR search tool if your
	postcode at point of entry to undergraduate study falls into Q1 or
	Q2 of the government's POLAR4 classification.
	Evidence: Evidence of your postcode at point of entry.
Underrepresented	Question: Do you identify as belonging to an ethnic group and/or
Ethnic Group	gender underrepresented at postgraduate level in the physical

	sciences and engineering at Cambridge? Currently
	underrepresented ethnicities are: Black British, Mixed Black
	British, British Bangladeshi, and British Pakistani. Currently
	underrepresented genders include any gender other than male.
	Question: Are you a mature undergraduate student (i.e. 21 years
	of age or over at the start of your current undergraduate course)?
Mature Student	
	Evidence: Proof of age and university transcript showing course
	start date.
	Question: Are you in receipt of full state support for maintenance
	for your course of undergraduate study?
	Evidence: Scanned copy of the Student Finance (or Student
State Support	Awards Agency Scotland) Notification of Award letter for the full
	amount of maintenance received; this should detail any loan/grant
	in addition to the standard government loan that all UK resident
	students are eligible for; any screenshot must include: your name;
	the name of the issuing authority (i.e. Student Finance England);
	and the amount of funding received and confirmation of this.
	Question: Have you been granted refugee status in the UK?
Refugee Status	
	Evidence: Name, title, and contact details of a non-academic
	referee who can speak to your situation.*

\*We will offer instructions to referees if and when we contact them. Requested references will be short and will simply confirm the widening participation criterion in question. Referees could be a teacher, neighbour, family friend, social worker, doctor, or suchlike depending on your circumstances; the choice of appropriate referee is yours but should ideally not be a partner or immediate family member.

#### 9. Virtual Open Day and Interviews

We will invite shortlisted candidates to a virtual open day during the week commencing the 6<sup>th</sup> March 2023 (TBC). Candidates will have the opportunity to meet one another as well as current postgraduate students at the NanoDTC, and will be offered virtual tours of Cambridge laboratories and facilities. On the same day, shortlisted candidates will be invited to two short

(c. 10-15 minute) interviews with a small panel of assessors. The interviews will take the form of a conversation, will further explore what you wrote in your application, and will focus on the selection criteria outlined above (i.e. opportunity, interest, and academic achievement and potential). Your satisfaction of the eligibility and widening participation criteria will *not* be discussed in the interviews. More details regarding the virtual open day and interviews will be provided to shortlisted candidates in due course.