



Windsor Fellowship Prostate Cancer UK Internship Programme

Internship information pack

Internship placement information

Host institution:

University of Essex

Host laboratory address:

School of Life Sciences, University of Essex, Wivenhoe Park, Colchester, Essex, CO4 3SQ

Host lead and joint lead researchers:

Drs Greg Brooke and Antonio Marco

Project title:

Exploring Genetic Differences in Prostate Cancer Risk

Research Project summary:

Why do some men have a greater risk of developing prostate cancer than others? This internship will investigate genetic differences that may contribute to variation in prostate cancer risk between ancestral populations, with particular relevance to men of Black ancestry, who have a higher risk of developing the disease. You will join a Prostate Cancer UK-funded research project at the University of Essex investigating how small changes in DNA can affect the activity of genes involved in prostate cancer. The focus is on regions of DNA that respond to the androgen receptor, a protein that controls how cells respond to the male sex hormone and plays an important role in prostate cancer.

Combining bioinformatics with laboratory experiments, you will use genomic databases and computational tools to identify and prioritise genetic variants. You will then investigate selected variants using molecular cloning and cell-based experiments. These experiments use a light-producing reporter (luciferase) to measure whether a DNA change alters gene activity in response to hormones. With support from the research team, you will analyse and interpret your findings and prepare a scientific poster and short report. Your work will contribute to research aiming to identify genetic markers that could improve the assessment of prostate cancer risk and support earlier, more targeted screening.

The placement offers experience of both computational and experimental “wet-lab” cancer research, alongside training and guidance to help you explore postgraduate study and research careers.

What skills, techniques and/or methods will you develop during the project:

You will develop both computational and laboratory research skills, with training and support throughout the placement. You will learn to use genomic databases and bioinformatics tools to identify and prioritise genetic variants that may affect prostate cancer risk. This will include comparing variant frequencies between ancestral populations and assessing their potential effects on gene regulation.

In the laboratory, you will gain experience in molecular cloning, bacterial transformation, plasmid preparation and agarose gel electrophoresis. You will learn how DNA sequencing is used to verify your constructs, how to grow mammalian cells and how to introduce DNA into them by transfection. You will use luciferase reporter assays, with β -galactosidase normalisation, to investigate whether selected genetic variants alter gene activity in response to hormones.

You will also develop skills in experimental design, appropriate controls, health and safety, laboratory record keeping, data management, statistical analysis and preparation of scientific figures. Discussion of your results at lab meetings, preparation of a poster and short report will help you build confidence in interpreting results and communicating your findings.

What induction, training, support and guidance will be provided to you:

You will receive a structured induction to the University of Essex, the School of Life Sciences and the research group. This will include a tour of the facilities, introductions to colleagues and training in laboratory health and safety, risk assessments, equipment use and laboratory procedures. Greg and Antonio will jointly supervise your project. Greg will lead your laboratory training, while Antonio will support the bioinformatics and computational elements. You will receive day-to-day guidance, regular individual discussions and opportunities to review progress, ask questions and receive feedback through weekly laboratory meetings.

Our Prostate Cancer UK funded research technician Charu and postdoctoral researcher Aygun will provide additional practical support. Other postdoctoral researchers, technicians and PhD students working in the laboratory will also be on hand to offer guidance where needed. Working alongside this wider team will give you opportunities to learn about other research projects, explore different approaches and become part of the research community.

Dr Anthonia Ekperouh, a former PhD student from the group now based at University College Cork, will act as an independent mentor. She will offer a perspective outside the supervisory team on postgraduate study, career development and navigating academia. Throughout the placement, you will also receive guidance on research careers, postgraduate applications and CV development. You will also have the opportunity to present your findings (poster presentation) at the School's Graduate Forum, allowing you to discuss your work with our wider research community. Following the internship, we will remain available to provide advice, references and support for your next steps.

Can the project/internship be completed part-time:

Yes. We can accommodate part-time working and will agree a suitable schedule with you. Where possible, the placement could be extended to provide the equivalent of eight weeks of full-time experience. The project combines computational and laboratory work. Some computational activities could be undertaken remotely where appropriate, while laboratory experiments would require attendance on campus and would be scheduled around your agreed working days. You will receive the same training, supervision and career guidance as a full-time intern, with meetings and project milestones adapted to your working pattern.

Can host institution provide accommodation for the duration of the internship programme:

The University of Essex offers on-campus accommodation at its Colchester Campus, subject to availability. Rates for summer 2027 have not yet been confirmed. There is also a wide range of private rental accommodation close to the University. If you require accommodation, we will help you explore suitable options, including through the University's Accommodation team.

Stipend offer for this internship:

'Real Living Wage' (£13.45/hour) for 35 hours/week - a stipend of £3,766 over 8 weeks

Internship placement requirements

Eligibility criteria:

To be eligible for the internship, you must meet the following criteria:

- Must be in your penultimate or final year of undergraduate study, or a graduate who has yet to, but wants to pursue a MSc and/or PhD and a career in prostate cancer research.
- Must be currently studying towards, or hold, a relevant STEM undergraduate degree in the UK. Graduates must have received a minimum 2:2 grade.
- Must be a permanent resident in the UK, be eligible for home fee status and not have any restriction on their right to work in the UK.
- Must self-identify as being from a Black background, including a mixed background, for example: Black British, Black Welsh, Black African, Black Caribbean, Black Other and Mixed Black background.
- Must be a British citizen and have 'Home' tuition fee status.
- Must be free to attend a laboratory placement between July and August 2027.

STEM undergraduate degrees that would be suitable for an intern matched with this project/placement to hold or be undertaking:

This project would suit students studying towards, or holding, a degree in:

- Biological Sciences
- Biomedical Science

- Biochemistry
- Molecular Biology
- Genetics or Genomics
- Human Biology
- Cancer Biology
- Biotechnology
- Medical Sciences or Medical Biosciences
- Bioinformatics or Computational Biology
- Data Science with a biological or biomedical focus

We welcome applicants interested in developing both computational and laboratory skills. Previous experience of the techniques is not expected; training and support will be provided throughout the placement.

Interview and recruitment processes for this placement:

Shortlisted applicants will be invited to an online interview with the research team. You will receive an accessible project summary in advance to help you prepare. No substantial pre-interview task will be required. The interview will explore your motivation for applying, interest in the research, relevant transferable skills and what you hope to gain from the placement. All candidates will be asked the same core questions and assessed against consistent criteria.

We recognise that applicants will have had different opportunities to gain research experience. Selection will therefore focus on your potential, enthusiasm and willingness to learn, rather than extensive previous laboratory or coding experience. Interviews are expected to take place in January 2027.

Internship additional information

Relocation

If you are required to relocate to undertake this internship, you may be eligible to claim relocation costs. Your commute must exceed 1.5 hours each way and you must demonstrate that daily commuting is impractical due to time, cost, or transport availability.

Eligible relocation costs:

Category	Amount over 8-week placement
Accommodation	£1,800
Travel	£100
Moving/setup	£150
Local transport	£160
Total	£2,210

Requirements for requesting relocation costs:

Proof of Expenses - Reimbursement requirements: Receipts for accommodation, travel, or moving costs. Signed lease or booking confirmation.

Type of Costs Covered - Usual eligible costs: Temporary accommodation (short-term rental, student housing); Travel to and from the internship location (start/end of program); local transport. Not usually covered: Food and daily living expenses; Luxury accommodation upgrades; Costs without receipts

Tax Considerations - In some cases, relocation support may be treated as taxable income. This can apply to lump sum payments or un-evidenced payments.

Please note in your application if you require relocation costs for a placement you are applying for. Please note, there is only budget for a finite number of relocation costs, so not all requests can be accepted.

Project-external development opportunities and support

As part of this internship, the Windsor Fellowship and Prostate Cancer UK will offer the following development opportunities and support:

- The Windsor Fellowship will provide pastoral support in personal and professional development throughout the duration of the internship.

- Internship Programme alumni will be enrolled onto Prostate Cancer UK's [Researcher Mentoring Scheme](#).
- Alumni will be invited to Prostate Cancer UK researcher events and conferences.
- Interns will be supported by a Prostate Cancer UK grant manager before and throughout the duration of the internship.
- Prostate Cancer UK will provide interns with support and guidance in finding postgraduate opportunities (e.g. PhD studentships).

Code of conduct

1. Interns are expected to abide by the host organisation's employee manual, code of conduct, or similar standards (including dress code, where applicable) that apply to interns and/or employees at the site.
2. Interns must act in a professional and ethical manner including being punctual, dressing appropriately, fulfilling commitments, meeting deadlines, and maintaining a cooperative attitude.
3. Interns understand that permissible absences from the internship site include illness and serious circumstances, and that they will notify their host institution in a timely manner should these situations occur.
4. Interns must maintain confidentiality of any information gained regarding the host organisation's clients, projects, work, and personnel. Additionally, interns will respect copyright laws and intellectual property rights.
5. Interns understand that information about the host organisation should not be broadcast in public spaces, including online platforms such as YouTube, Facebook, X, blogs, websites, or message boards without expressed written authorisation of the host institution.
6. Interns will seek feedback from lead applicant(s), accept suggestions and constructive criticism, and strive to improve performance.
7. Interns must immediately report to the host institution or Prostate Cancer UK with any concerns about an internship placement, including requests to engage in unethical or illegal activities, exposure to sexual harassment, discrimination or unsafe situations, or any other circumstances that create an uncomfortable environment for the intern.

Interns recognise that the host institution and/or employer have the right to terminate the internship experience at any time if it is deemed by Prostate Cancer UK or the host institution that the intern has violated the code of conduct or otherwise negatively compromised the internship programme and/or host organisation.