

## Job Description

<b>Job Title:</b>	NIHR Undergraduate Internship - Statistics
<b>Department/Division/Faculty:</b>	Imperial Clinical Trials/School of Public Health/Medicine
<b>Campus/Location:</b>	Stadium House, White City Campus, London
<b>Job Family/Level:</b>	£21.60 per hour (inclusive of holiday pay, for the duration of the contract of up to 8 weeks)
<b>Responsible to:</b>	Dr Agnieszka Lemanska, Assistant Professor in Digital Health and Clinical Trials
<b>Line Management for:</b>	N/A
<b>Key Working Relationships (Internal):</b>	Members of the Imperial Clinical Trials Unit (ICTU) team, academic, statisticians and operation managers working within ICTU
<b>Key Working Relationships (External):</b>	Pharmacists, clinicians, primary care
<b>Contract type:</b>	Full time (35 hours per week) and fixed term for 8 weeks over the summer period from 6th July to 28th August.

### General information

We have funding from the National Institute for Health and Care Research (NIHR) Undergraduate Internship Programme to fund three undergraduate students to undertake internships at Imperial Clinical Trials Unit (ICTU).

We are seeking students who are interested in pursuing a career in data science research or clinical trials. This job description describes one internship for students who have a strong interest in data science and strong background in mathematics and statistics.

The Imperial Clinical Trials Unit (ICTU) (<https://www.imperial.ac.uk/clinical-trials-unit/>) is a UKCRC fully registered clinical trials unit, bringing together academic, clinical and trial management expertise. Our collaborative approach aims to deliver world-class clinical trials spanning all phases and designs, encompassing a diverse range of therapeutic areas.

The statistics internship will take place for 8 weeks from 6th July to 28th August, and would be ideal for undergraduate students studying statistics, mathematics or related quantitative subject.

### The project

**Title:** Vitamin B12 prescribing in England: longitudinal analysis of trends using a national database.

When applying please refer to this project as Vit B12 in the motivational letter.

**Project overview:** The intern will utilise data from the Secondary Care Medicines Data (SCMD), which covers prescribing across all NHS Trust pharmacy departments in England. The dataset starts in January 2019 and is updated monthly. This will enable a comprehensive view of historical and current trends and offers a unique opportunity to explore long-term changes in healthcare practice. The primary supervisor for this project has extensive experience using these data and has full access to them. Therefore, there will be no delays in data access for the intern. The intern will be provided with fully anonymised, aggregate monthly prescribing data, ready for trend analysis. No delays, ethics approval, or information governance reviews will be required for access, making the project ideal for rapid delivery within an 8-week internship.

For more information, please see the publication on primary care data <https://bmjopen.bmj.com/content/15/2/e093748>. The new intern will produce similar analysis but on secondary care data. There will be an opportunity to publish the research at the end of an internship.

**Supervision:** Dr Agnieszka Lemanska, Assistant Professor in Digital Health and Clinical Trials at ICTU will provide day-to-day supervision and organise learning and research activities for the intern, supported by Louise Cherrill and Emanuela Falaschetti, statisticians at ICTU. The intern will join two other interns from the same cohort and will be fully integrated within the team.

**Location:** Stadium House, White City campus, Imperial College London

## Key Responsibilities

The main duties of the post will include:

- Develop an understanding of the basic principles of data science and statistics applied to NHS data
- Learn statistical principles and methods for the analysis of longitudinal prescribing data within the NHS
- Data preparation and data management
- Undertake data analysis and present the trends over time
- Undertake literature review and discuss the results in the context of already published research
- Appraise the results in terms of clinical implications and healthcare policy
- To interact closely with the other statisticians, interns, and researchers at Imperial College London
- To attend relevant internal meetings and wider College events
- To present their research project results and their experience of completing a CTU internship to the wider CTU team at the end of the placement
- To write up a report about their experience and skills learnt at the end of the placement

## Other Duties

- To observe and comply with all College policies and regulations, including the key policies and procedures on Confidentiality, Conflict of Interest, Business Continuity, Data Protection, Equal Opportunities, Ethics, External Interests, Financial Regulations, Health and Safety, Information Technology
- To undertake specific safety responsibilities relevant to individual roles, as set out on the College Health and Safety Structure and Responsibilities web page

## Person Specification

Requirements	Essential (E)/ Desirable (D)
Candidates/post holders will be expected to demonstrate the following:	
<b>Education</b>	
Be in the process of studying for an undergraduate degree (statistics, mathematics or related quantitative subject), having completed at least the second year or between the third and fourth year of a four-year degree	E
<b>Experience</b>	
Experience of using standard statistical packages, such as Stata and /or R or other programming languages	E
<b>Knowledge</b>	
Demonstrable interest in learning about healthcare data collection and analysis	E
Some knowledge of research design and clinical evidence generation	D
<b>Skills &amp; Abilities</b>	
Excellent interpersonal skills	E
Ability to communicate and collaborate effectively, both verbally and in writing, with staff from a range of disciplines	E
Ability to work both as an individual and as part of a team	E
<b>Other</b>	
A meticulous approach and attention to detail	E
An interest in pursuing a career in health research	E
An interest and willingness to learn new information and acquire new skills quickly	E

## Further Information

Please note that job descriptions cannot be exhaustive, and the post-holder may be required to undertake other duties, which are broadly in line with the above key responsibilities.

Imperial College is committed to equality of opportunity and to eliminating discrimination. All employees are expected to follow the [Imperial Values & Behaviours framework](#). Our values are:

- Respect
- Collaboration
- Excellence
- Integrity
- Innovation

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Employees are also required to comply with all College policies and regulations paying special attention to: Confidentiality, Conflict of Interest, Data Protection, Equal Opportunities, Financial Regulations, Health and Safety, Information Technology, Smoking, Private Engagements and Register of Interests. They must also undertake specific training and assume responsibility for safety relevant to specific roles, as set out on the [College Website Health and Safety Structure and Responsibilities](#) page.

*We are committed to equality of opportunity, to eliminating discrimination and to creating an inclusive working environment for all. We therefore encourage candidates to apply irrespective of age, disability, marriage or civil partnership status, pregnancy or maternity, race, religion and belief, gender reassignment, sex, or sexual orientation.*