JESUS COLLEGE, OXFORD

BENNETT INSTITUTE
JUNIOR RESEARCH FELLOWSHIP (JRF)
IN APPLIED HEALTH DATA SCIENCE
FURTHER PARTICULARS

1   THE APPOINTMENT

The College invites applications for the (stipendiary) Bennett Institute Junior Research Fellowship in Applied Health Data Science, tenable for a fixed term of three years from 1 September 2024, or as soon as possible thereafter. This post is non-renewable. The Fellowship is intended for outstanding candidates who are at an early stage in their academic career. Applicants should have been awarded their doctorate after 1 September 2019 or be nearing submission of their doctoral thesis. The post is generously funded by Peter Bennett who has also funded the University's Bennett Institute for Applied Data Science and the Bennett Chair in Evidence-Based Medicine.

The objectives of the College in making this appointment are to develop and strengthen the research profile of the College, and more generally to contribute to the goal of maintaining the University of Oxford as a leading centre for research.

The post-holder will join the Bennett Institute for Applied Data Science, in the Nuffield Department of Primary Care Health Sciences. The Bennett Institute is a mixed team of academics, clinicians and software engineers that aims to embody new ways of working: promoting open science though sharing all code as open source, and working openly and collaboratively by design. It leads transformative projects such as OpenSAFELY, OpenPrescribing, TrialsTrackers, all of which have achieved substantial academic and real world impact.

Responsibilities/duties
Develop and deliver a proposed programme of research. This must be in an area directly relevant to the Bennett Institute, and applicants are very strongly encouraged to familiarise themselves with this work. As examples, proposals might include:

- Delivering high quality epidemiology research using GP and other electronic health record datasets available through the OpenSAFELY platform covering the whole of England.
- Developing or evaluating new data science methods for monitoring and improving health service activity and outcomes, using or augmenting tools and services such as OpenPrescribing or OpenSAFELY.
- Developing or augmenting new methods and tools for management of sensitive data, working with - or extending - the OpenSAFELY tools.
- Leading the development and promotion of open science, specifically:
  - Developing and using tools and methods that optimise reproducibility, privacy, efficiency and quality in electronic health records research.
  - Optimising the adoption of open methods and open code in research.
  - Optimising the regulation of research and data science on sensitive health and non-health datasets.
  - Optimising reproducibility of research and unbiased clinical trial reporting (e.g. with TrialsTracker).
- Developing and evaluating methods and tools to protect patients' privacy when analysing large disclosive datasets (e.g. profiling the risk presented by datasets containing sensitive personal data, such as that used by OpenSAFELY).
- Research into the public understanding of the risks associated with research projects conducted in sensitive personal data (e.g. reidentification of individuals within electronic health records), and the information given to patients during PPIE work.
- If you are unsure about the relevance of your proposed work to the Bennett Institute, please discuss with us before applying (contact alex.walker@phc.ox.ac.uk).

In addition to pursuing the research objectives described above, the successful applicant will:

- Build an international research profile.
- Manage their own academic research and administrative activities. This involves small scale project management, co-coordinating multiple aspects of work, meeting deadlines and supporting interactions with research collaborators.
- Disseminate the results of research through publication of books and/or articles in scholarly journals, and participation in conferences and seminars. Journal articles and conference proceedings must be deposited in an open access archive within three months of acceptance, or in exceptional cases (where this was not possible) within three months of publication.
- Engage in knowledge transfer activities, as and when appropriate.
- Act as Graduate Advisor to postgraduates (this is not a supervisory role).
- Attend/co-organise College research symposia.
- Contribute to the general academic life of the College.

Criteria for appointment
The successful applicant will meet the following criteria:
- Have a coherent proposed research programme for the duration of the Fellowship, aligned to one of the research areas outlined above, of a standard which will contribute to and enhance the national and international profile of the field in the University.
- Early career researcher on an independent career track.
- Strong educational background, with a good first degree in a relevant subject or an equivalent qualification.

- In possession of a doctorate in a related field (awarded since 1 September 2019), or close to completion of the doctorate. Applicants who have not yet submitted their doctoral thesis are asked to include a clear timetable for its completion within 3 months of taking up the post (expected to be 1 September 2024).
- Have a record of publications and other output demonstrating research expertise in the field, appropriate to the career stage of the applicant.
- Be able to communicate well about their subject.
- Be able to demonstrate why the Bennett Institute and Jesus College are the best place to conduct their proposed research.

Jesus College

Jesus College has a strong commitment to promoting and enabling education, learning, scholarship and research at the highest levels amongst its students and academic staff, whilst preserving an informal and friendly atmosphere. Founded in 1571 by Elizabeth I, the College is a self-governing educational charity and is one of the 39 constituent colleges of Oxford University. With Professor Sir Nigel Shadbolt FRS FREng, as its Principal, the College comprises over 100 Fellows, 50 lecturers, just over 330 graduates and just under 400 undergraduates, and 90 support staff. The College is located on an attractive historic site in the centre of Oxford, with excellent access to the Bodleian Library and other University libraries, the Science Area, and the University's department and faculty buildings. Two annexe sites, in north and east Oxford, allow the College to provide accommodation for almost all its students.

In 2022 the College opened [the Cheng Yu Tung Building](#) on its main Oxford site. In addition to postgraduate accommodation, teaching and learning spaces and other student facilities, this transformational space includes [the Cheng Kar Shun Digital Hub](#), fostering innovation with digital technology, within and across disciplines, and enabling researchers to explore new methodologies and share research results in innovative ways. The Digital Hub engages academics, students, staff, schools, and the public with digital research and teaching, events and activities, thus building on the University of Oxford's world-leading research, teaching, collections, and technologies.

The College encourages the academic achievements of its students (being regularly towards the top of the table for the best performance in final examinations) with excellent teaching, and generous and varied financial support. Similarly it celebrates and supports the academic endeavours of its Fellows, both in research and teaching.
The College held a [Strategic Review of its activity for 2023-2027](#), setting out a number of important academic themes.

Professor Ben Goldacre MBE is the first Bennett Professor of Evidence-Based Medicine. The affiliation of this new Statutory Chair to the College is part of an endowment made possible thanks to the generosity of philanthropist Peter Bennett and his wife Desiree. Peter is the founding benefactor of The Peter Bennett Foundation, which works to support academic endeavours to effect systemic change in the global community.

Full information about the College is available on the [college website](#).

Information about academic staff at Jesus College, including their research and teaching interests, may be found at https://www.jesus.ox.ac.uk/about-jesus-college/our-community/people/.

Bennett Institute for Applied Data Science

In 2021, the Peter Bennett Foundation announced the creation of the new Bennett Institute for Applied Data Science. The Institute, based at the Nuffield Department of Primary Care Health Sciences, builds on a foundation of world-leading healthcare data science from the DataLab at the University of Oxford. It brings together a diverse group of academics from a range of disciplines, including clinicians, software engineers, policy experts and statisticians, who develop, use and evidence new tools and methods to ensure that data and evidence can have impact in the world, improving the lives of patients and citizens.

Professor Goldacre, who is Director of the Bennett Institute, provides academic leadership in the field of data science, helping to unite and focus efforts in this rapidly-changing field across University departments and divisions. The endowment, funded by the Bennetts in collaboration with Jesus College, also enables a series of four consecutive Junior Research Fellowships to complement and support his work to further research into the better use of data, evidence and digital tools in healthcare and policy, and optimise the impact of interventions to achieve improved outcomes.

Key current projects from the Bennett Institute include:

- OpenSAFELY.org, a new highly secure platform for analysis of electronic health records: by developing new methods for remote and federated data analysis OpenSAFELY has been able to grant users access to run epidemiology research and other analyses across the GP records of the whole population of England. It is now supporting 155 projects from 22 different organisations including universities, NICE, the NHS and more, with papers published in Nature, Lancet, BMJ and similar. OpenSAFELY is driven by deep methodological innovation in data science and development of new standards and tools for common longstanding challenges such as electronic health records data management, and federated analytics. All code is on GitHub under open licences alongside comprehensive technical documentation. The NHS England OpenSAFELY Service is expanding in 2024 to support research use on non-COVID topics.

- OpenPrescribing.net, an open explorer for prescribing data that lets any interested user explore what is being prescribed in every GP practice in England, with a range of data-driven tools to identify variation in care, changes in adoption of new innovations and treatment guidelines, and the impact of price shocks. This service has over 20,000 unique users per month, but has also supported dozens of research papers covering a range of clinical and methodological areas. In addition, our teams have developed a range of new data science methods (around challenges such change detection and outlier detection) that are then implemented in the live public-facing service.

- TrialsTracker.net is a suite of tools to monitor compliance with ethical and legal obligations on clinical trial results reporting across trials conducted in Europe and the US; these tools have been widely used by researchers and by policymakers (including

Select Committees) to improve transparency in clinical research; and generated high impact publications in Lancet, BMJ and similar.

- Our Policy team works on challenges around improving quality, efficiency, reproducibility, openness and privacy when analysts use sensitive personal data for research.

II   ENTITLEMENTS

1. *Salary*: starting at Grade 8 point 1 (National Spine Point 37) - of £45,585 per annum (with effect from 1 August 2023). Increment rise each October.

2. *Pension:* the person appointed will be eligible to join USS, under which scheme (currently) 9.8% of salary is deducted.

3. *Office space:* in College (equipped with a standard Windows desktop PC and black & white printer).

4. *Accommodation:* a single Fellow may rent furnished rooms, if available.

5. *Dining rights*: the Fellow will be entitled to lunch and dinner free of charge with members of the Senior Common Room during term and vacation, except when the kitchens are closed.

6. *Membership of the Senior Common Room (SCR):* £60 per annum charge payable.

7. *Research allowance:* to the value of £1,000 per annum (reviewed annually) is available towards the support of research, e.g. laboratory expenses, purchase of books, travel, or attendance at conferences.

8. *Major Research Grants Fund:* Junior Research Fellows are eligible to apply to a cash-limited Major Research Grants Fund, currently worth approx. £40,000 per annum. Applications are invited in spring each year. Preference may be given to Fellows at an early stage in their career and to those with little access to alternative funding sources.

Please note that a Junior Research Fellowship does not carry with it membership of Governing Body.

Intellectual life and the College community
Each term there are a number of events for members of the Senior and Middle Common Rooms to meet to present and discuss their research, as well as many varied and interesting online events open to Fellows, staff and alumni. Additional events throughout the year include student musical, dramatic and choral productions.

The Fellows of the College form a lively multi-disciplinary and international community. Weekday lunches in particular are a popular time and there would be excellent opportunities for the Junior Research Fellow to speak to a broad range of other Fellows and lecturers in many different disciplines. Guest Nights on Wednesdays and Fridays during term offer very pleasant occasions for Fellows to entertain professional and personal guests, and a chance to

meet a wide range of interesting people. The College hosts a number of well-attended formal dinners throughout the year, at which the Junior Research Fellow and their guest would be most welcome.

Facilities
Junior Research Fellows may make use of the College's well-equipped seminar and other rooms for meetings, entertainment, conferences etc., and can book accommodation for guests in dedicated Fellows' guest rooms. Junior Research Fellows regularly use College facilities to host seminars, colloquia and conferences of several days' duration. The Fellows' Resources Room provides networked computers, printers, fax, and photocopiers. The College's beautiful 17th-century library offers working and reading spaces for all Fellows, with Wi-Fi (the student library is separate and may also be used).

III   OTHER TERMS AND CONDITIONS

Probation: the appointment will be subject to an initial probationary period of one year, during which the appointment may be terminated by three months' notice on either side. Probation is assessed in the third term by the Governing Body on the basis of a self-report from the JRF, and two references. A usual condition of passing probation is that any JRF who took up the post without having completed their doctorate should have gained their doctorate by the time they write the probationary repot. Upon satisfactory completion of the initial first year of appointment, the post-holder will be eligible for re-election for a further two years, non-renewable. A further self-report should be submitted at the end of the Fellowship tenure.

Mentor: the College will ascribe a Fellow in a cognate area to be the Junior Research Fellow's academic mentor.

Teaching: Junior Research Fellows are encouraged to develop their teaching skills, if appropriate, and may undertake a maximum of six hours teaching per week in term. However, there is no requirement to undertake any teaching at all during the Fellowship if the holder does not wish to do so.

Equal opportunities: Jesus College welcomes and celebrates diversity. We strive towards creating an inclusive environment, where our staff and those associated with the College feel valued and respected. We want them to thrive, regardless of their age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex, and sexual orientation. Our staff are an integral part of our community, and we cherish equally those qualities that make each of us unique, and those that bring us together.

Applicants invited for interview will be asked whether they require any particular arrangements to make the interview more convenient and effective for them. Where suitably qualified individuals are available, the selection committee will contain at least one member of either sex.

Data protection: All data supplied by applicants will be used only for the purposes of determining their suitability for the post and will be held in accordance with the principles of the Data Protection Act 2018 and the [College's Data Protection Policy](#).

Work permits: All appointments are made in accordance with the University of Oxford Equal Opportunities Policy and Code of Practice and applications are welcomed from a wide range of candidates. The University undertakes not to discriminate unlawfully against any applicant on the basis of any information revealed.

The Immigration, Asylum and Nationality Act 2006 makes it a criminal offence for employers to employ someone who is not entitled to work in the UK. We therefore ask applicants to provide proof of their right to work in the UK before employment can commence.

Applicants who would need a work visa if appointed to the post (the salary is above the general salary threshold of £26,200 for a Skilled Worker visa) are asked to note that under the UK's points-based migration system they will need to demonstrate that they have sufficient points, and in particular that:

(i) they have sufficient English language skills (evidenced by having passed a test in basic English, *or* coming from a majority English-speaking country, *or* having taken a degree taught in English)

and

(ii) that they have sufficient funds to maintain themselves and any dependants until they receive their first salary payment.

Further information is available at: https://www.gov.uk/guidance/new-immigration-system-what-you-need-to-know#skilled-workers.

IV   APPLICATION PROCEDURE

To apply please complete the online form at https://ams.jesus.ox.ac.uk/Forms/url/JRFinAppliedHealthDataScience by **12 noon on Friday, 9 February 2024.**

Please note that you will be asked to upload the following **(in PDF file format only):**
1. A covering letter.
2. A Curriculum Vitae **containing a list of publications**.
3. An outline of the proposed programme of research (two sides of A4 max).
4. A note containing the names and contact details, including email addresses, of two referees.
5. An outline of a plan to submit doctoral thesis within 3 months of taking up the post, if applicable.

The College will seek references at a shortlisting stage. There is no need for referees to send in a reference prior to being contacted.

If interviews are conducted in-person, reasonable interview expenses will be reimbursed, and overnight accommodation can be offered if required. Interviews may be conducted remotely.

Queries may be addressed through the Principal's PA, Mrs Helen Gee (helen.gee@jesus.ox.ac.uk).

PLEASE NOTE: previous applicants should not apply.