



Parks College

University of Oxford

Official Fellowships at Parks College

Further particulars for Major Theme posts in:

- (1) Artificial Intelligence & Machine Learning
- (2) Environmental Change
- (3) Cellular Life

Introduction

Parks College is Oxford's newest college and this is an unprecedented opportunity to become one of its inaugural Official Fellows and a member of its Governing Body, playing a key role as the College develops its policies and culture ahead of admitting its first 100 graduate students in October 2021.

The vision

An Oxford college is by definition a multi-disciplinary community. The foundation of Parks College offers an exciting opportunity to build a vibrant new centre of academic research and wider interaction, focused on exploring some of the most important questions of the 21st century.

Parks College will provide an environment that stimulates and facilitates interdisciplinary research, while emphasising the qualities of innovation, leadership and entrepreneurship. It will support a community of scholars who embrace opportunities to interact with researchers beyond the boundaries of their own disciplines and to engage with colleagues beyond the realm of academia. The goal is to create a working environment for the active promotion of entrepreneurial thinking, collaborative working and interdisciplinary exchange.

All Fellows will be expected to subscribe proactively to the college ethos and to commit to developing both its intellectual and outreach activities. The College Fellows will together foster a culture of interdisciplinary exchange by organising regular college events that catalyse them, such as seminars, workshops and reading groups.

Posts within the Major themes

To promote the ethos and practice of interdisciplinary interaction, there will be an initial focus on three research clusters, whose themes have been chosen for their wide reach across the University, their strongly interdisciplinary nature, Oxford's existing and potential strengths in these areas, and their innovation and entrepreneurship potential. The initial clusters will focus on the topics of (a) Artificial Intelligence & Machine Learning, (b) Environmental Change, and (c) Cellular life. These clusters have natural synergies, enabling cross-cutting insights and research collaborations to emerge. Each of the three areas will be interpreted as broadly as possible, as we are keen to attract researchers from all four of the University's Academic Divisions. Once there is a full complement of graduate students it is anticipated that the college will have six to eight interdisciplinary clusters.

Artificial Intelligence (AI) and Machine Learning

The University of Oxford is one of the world's leading centres for Artificial Intelligence (AI) and machine learning research, addressing problems of global significance from billions of data streams, people and sensors. In particular, there is pioneering work taking place in robotics, driverless cars, healthcare, finance, privacy and ethical issues in the Departments of Engineering Science, Computer Science, Statistics, the Mathematical Institute and the Oxford Internet Institute.

Within the Artificial Intelligence and Machine Learning cluster, we would like to have not only computer scientists and engineers, who are working on fundamental principles or applications in any domain from finance to healthcare or robotics, but also neuroscientists interested in characterising human intelligence and philosophers working in philosophy of mind.

Environmental change

The college will bring together researchers working on many aspects of the drivers and impacts of, and responses to, environmental change. The breadth of this theme covers research ranging from the institutional, social and behavioural drivers of biodiversity loss and climate change; earth system changes (physical, biological and social); and responses to these changes, including human relationships to their environment, international policy processes, and behavioural and technological innovations.

Within the Environmental Change cluster, we are looking for researchers with interests in environmental change across all four divisions. This includes both researching the processes of environmental change (biological and physical, at any spatio-temporal scale); human relationships to the changing environment (past, present and future); and societal and policy responses to these changes (from the individual to the global levels).

Cellular life

The cellular life cluster will bring together researchers seeking to understand the underlying mechanisms of living organisms, with an emphasis on the cell – the fundamental building block of life. From the nerve cells that wire our brain to the specialised cells of the pancreas and liver that control how our body processes food, understanding how cells work will transform our knowledge of ourselves, as well as our ability to cure disease. Research on cellular life impacts not only medicine but also public policy; for example, ageing, which is caused by the accumulation of cellular defects, is of as much interest to social scientists as to gerontologists.

Within the Cellular Life cluster, we are keen to attract researchers from the Medical Sciences Division working in any discipline from physiology to genomics, studying diseases as varied as diabetes and cancer, as well as social scientists with interests ranging from medical ethics to the promotion of healthy ageing.

Person specification

All applicants must have a strong commitment to the values of the College.

As active and engaged members of the Governing Body, postholders will develop strategies and policies as the College is established, and begins to thrive. They will also be involved in the recruitment and mentoring of the College's Research Fellows (post-docs) and graduate students (200 p.a. in a steady-state), and participate in the outreach, engagement and social activities which will help to build a thriving college community. From October 2021 all Fellows will act as adviser to a number of Parks College graduate students.

Postholders' research must be related to one of the three themes (broadly interpreted). Fellows within the themes will be expected to organise seminars, workshops, reading groups and weekly invited lectures, for the whole college community. (Seminars and workshops will typically be jointly organised by two Fellows, from different disciplines but with a common interest.)

Benefits

Successful candidates will be elected to a Fellowship on a five-year renewable basis, with a mid-term review, and with renewal dependent on satisfactory performance in college duties. The contract will be coterminous with University employment.

Postholders will receive an annual allowance from 1st October 2020, as well as luncheon and dining rights from October 2021 (exact terms *tbc*). The allowance is likely to be in the region of £3k p.a. and can be paid either directly (and thus will be taxable), or as a research allowance (to support, for example, conferences, events, or research costs).

Eligibility

This is not an employment position and to be eligible applicants must be currently employed by the University in an RSIV, Grade 10, 9 or 8 post and as an independent researcher in an area related to (a) AI & Machine Learning; or (b) Environmental Change; or (c) Cellular Life.

Candidates with University contracts of less than five years are welcome to apply, with College election then coterminous with that shorter contract. The Selection Committee will however have regard for continuity in the college fellowship, and particular for provision for its graduate students from October 2021. University postholders who do not hold a contract for beyond October 2021 are thus unlikely to be elected.

Those who already have a Governing Body Fellowship with another college or society will not be eligible.

Selection criteria

In the early days of the college, when the Fellowship is small and the College's policies and procedures are being established, all Fellows may be required to turn their hand to a variety of tasks. This will require a degree of flexibility and problem solving not normally associated with a college fellowship.

In its steady state, the following are the requirements of the fellowship:

- a record of research leadership and an academic reputation commensurate with that of a Senior Research Fellow or Professor, in a relevant area
- strong commitment to, and track record in, interdisciplinary research
- commitment to the vision and approach of Parks College
- enthusiasm for working with colleagues from other Departments and Divisions, including the Gardens, Libraries and Museums, as well as researchers from centres of excellence outside the University, in the setting up and delivery of interdisciplinary activities within the college (for example seminar series, workshops and reading groups)
- willingness and capacity to act as the college advisor for Parks College graduate students
- ability to work effectively as part of a small, collaborative team, to influence and to build consensus
- strong communication skills, both written and oral
- ability to build relationships at all levels, to network effectively and to inspire confidence in students and colleagues
- as appropriate, a commitment to outreach, knowledge exchange, public engagement, and promoting innovation.

In selecting the Fellows the Committees will have regard for promoting a diversity of perspectives and approaches, and candidates will thus be assessed in relation both to the stated person specification, and the College's need for intellectual diversity within the advertised themes.

Applications

To apply, please send a (maximum) 10-page CV to the Senior Tutor, Dr Caroline Mawson (senior.tutor@parkscollege.ox.ac.uk) by noon on Tuesday 28th January, clearly specifying the post for which you are applying. This CV, attached as a pdf, should include your publications list, and a supporting statement (a) specifying your relevant skills and experience; and (b) describing how you would be able to contribute to the college:

- Given the overall limit of 10 pages, you may not be able to include your complete list of publications, in which case you should select the ones which are most relevant to your application.
- The supporting statement should explain how you meet the selection criteria for the post using examples of your skills and experience.
- In your text for how you would contribute to the college, it may be helpful for you to describe the first few interdisciplinary seminars that you would intend to run, should you be appointed to this post.

Please include contact details for two referees, one of whom should be your current Head of Department or equivalent. Referees will be contacted for shortlisted candidates only – please confirm if you consent for them to be contacted at that time. Applicants are also asked to complete an [equality form](#) for monitoring purposes only; these forms will not be viewed by members of the Selection Committees.

If you have any questions about your eligibility, please contact the Parks College President, Professor Lionel Tarassenko CBE FEng FMedSci (president@parkscollege.ox.ac.uk).

Parks College will be a diverse and inclusive community and encourages applications from candidates of all backgrounds.

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