

Academic Role Profile		
Job Title:	Lecturer (B) in Quantum Biology	
Responsible to:	Dean of Faculty or delegate	
Responsible for:	Research staff employed on programmes and awards directed by the post holder. May have supervisory responsibility for other staff.	

#### **Job Summary and Purpose**

To develop a personal research portfolio in line with the Quantum Biology Doctoral Training Centre and the University's research strategy, to teach at undergraduate and postgraduate level in quantum biology or related areas.

## Main Responsibilities/Activities

#### To support the research activities of the Faculty by:

Developing the research activities of the Faculty by sustaining a personal research plan independently and/or in collaboration with others within the Quantum Biology Doctoral Training Centre or as part of a larger research team.

Managing and undertaking research activities in accordance with a specific project plan, and supervising and guiding the work of staff and research students on own specialist area.

Developing innovative research proposals (as a self-contained item or as part of a broader programme) in the area of quantum biology, identifying sources of funding, submitting funding bids, and gaining positive reviews for these. Planning the research to be undertaken.

Publishing original research in quantum biology in appropriate journals or other media, as appropriate.

Attending appropriate conferences for the purpose of disseminating research results or for personal development.

#### To support the teaching objectives of the Faculty by:

Developing new teaching methods and designing programme units, and taking responsibility for the quality of programme units.

Planning, delivering and critically reviewing a range of teaching and assessment activities including lectures.

Training and supervising of students (including research students) and acting as a tutor for industrial/professional training year students, according to own area of subject specialism.

Setting/marking programme work, practical sessions, supervisions, fieldwork and examinations according to own area of subject specialism, and providing appropriate feedback to students.

Taking part in activities such as validating and examining in relation to the University's associated institutions.



# To undertake pastoral care of students

Using listening, interpersonal and pastoral care skills to deal with sensitive issues concerning students and provide support. Appreciating the needs of individual students and their circumstances. Acting as personal tutor and giving first line support. Referring students as appropriate to services providing further help.

## To engage in scholarship by:

Continually updating knowledge and understanding in the field or specialism of quantum biology. Extending, transforming and applying knowledge acquired from scholarship to teaching, research and appropriate external activities.

#### To contribute to the efficient management and administration of the Faculty by:

Performing such personal administrative duties throughout the Faculty as are recognised by the University as properly within the remit of the work of academic staff, as allocated by the Head of Faculty.

Advising, supervising and giving guidance to other staff

#### **Person Specification**

# The post holder must have:

An honours degree or an appropriate and equivalent professional qualification in a relevant subject

A doctoral degree

A strong interest in quantum biology

Experience in research in quantum biology or related disciplines

Normally former experience of working as a lecturer

Evidence of administrative and organisational skills

Evidence of current research/scholarship at post-doctoral level or equivalent

# **Relationships and Contacts**

The post holder will be a member of such Faculty Committees as may be relevant to their administrative duties, for example Faculty Board of Studies and Examination Board. New appointees will be assigned a senior colleague to guide their development and aid their integration into the Faculty and university. Research priorities will be agreed within the strategic framework of the research theme of which they are a member. Teaching and administrative duties will be allocated by the Head of Faculty, within the context of the teaching programmes agreed by the Faculty Learning and Teaching Committee or similar body.



# **Special Requirements**

To be able to participate in residential field work, in the UK or overseas, according to own area of subject specialism.

The post holder is expected to work outside normal office hours as necessary.

# All staff are expected to:

- Positively support equality of opportunity and equity of treatment to colleagues and students in accordance with the University of Surrey Equal Opportunities policy.
- Help maintain a safe working environment by:
  - Attending training in Health and Safety requirements as necessary, both on appointment and as changes in duties and techniques demand
  - Following local codes of safe working practices and the University of Surrey Health and Safety Policy
- Undertake such other duties within the scope of the post as may be requested by your Manager.



Addendum	
Job Title:	Lecturer in Quantum Biology

## Background Information/Relationships

The post holder is expected to lead an independent research portfolio that is supported by external funding and evidenced by high quality publications, whilst contributing to the teaching of aspects of quantum biology and related disciplines of biosciences at undergraduate and postgraduate level, including the supervision of doctoral level research. The Leverhulme Quantum Biology Doctoral Training Centre (QB-DTC) aims to spearhead forward-thinking multidisciplinary approaches to investigate the role of quantum mechanics in living organisms. The Centre currently supports 8 PhD students but this will rise to 21 in 2021. Approximately 16 academics from both the Faculty of Health and Medical Sciences and the Faculty of Engineering and Physical Sciences are associated with the Centre and we have active collaborations with several institutes, such as University College, London and the National Physics Laboratory. The role-holder will be expected to take a leading role in the QB-DTC, developing an independent research portfolio that builds on existing research aimed to investigate the role of quantum mechanics in systems such as photosynthesis, olfaction, avian navigation, enzyme catalysis or mutation, as well as pursuing new avenues of research in the field. The role-holder, in collaboration with the Centre's Director and co-Director will be expected to take an active role on development of the multidisciplinary postgraduate programme in quantum biology.

The successful candidate will be allocated two of the PhD scholarships and will be expected to recruit and supervise two PhD students to work alongside the post-holder. The successful candidate will also be expected to apply for research grants in the area of quantum biology and to take a leading role in the general management of the QB-DTC, for example, organising seminars and training for students.

Person Specification		
	Essential/ Desirable	
Doctoral Degree in Biological Sciences or related discipline	E	
Evidence of PhD student supervision	Е	
Experience in developing and maintaining external collaborations with a range of stakeholder groups.	E	
Evidence of research contract/grant success (ideally as PI) appropriate to career stage	Е	
Evidence of high quality publications in peer reviewed academic journals.	Е	
Track record of high quality teaching and/or supervision in the HE sector	Е	
Strong interest in quantum biology	Е	
Experience in quantum biology research or related discipline research	Е	
Experience in experimental quantum biology or related discipline research	D	
Teaching experience	D	



Special Requirements	Essential/ Desirable
To support the academic culture of the School and Department through regular attendance/leading (as appropriate) of meetings and related activities – both inside and outside of semester time. Due to the nature of academic roles, some travel, and evening and weekend attendance (subject to reasonable notice) will be required.	E

# **Key Responsibilities**

- 1. Conduct sustainable independent research to a national and international standard
- 2. Stimulate and facilitate research in Quantum Biology within the Quantum Biology Doctoral Training Centre.
- 3. Interact with colleagues in both the Faculty of Health and Medical Sciences and the Faculty of Engineering and Physical Sciences through collaborations to develop research grants and publications on a national and international level.
- 4. Enhance the academic culture of the School through attendance (as a speaker) at conferences.
- 5. Contribute effectively to the teaching of quantum biology and related areas of biosciences at undergraduate and postgraduate level.
- 6. Recruit and supervise PhD students.
- 7. Contribute to the strategic development and internal and external reputation of the Quantum Biology Doctoral Training Centre.

#### N.B. The above list is not exhaustive.