Faculty Doctoral Strategies

Faculty of Life Sciences – Executive Summary

The Faculty is the hub for life sciences research at UCL and is one of the most powerful groupings within Europe. It combines an outstanding research environment and world leading investigators amongst whom is Professor John O'Keefe, awarded the 2014 Nobel Prize in Physiology or Medicine.

The Faculty is internationally recognized for its curiosity led research in drug discovery, healthy ageing, neurosciences, structural, computational, molecular, cellular, developmental and environmental biology, fostering excellence across the breadth of life sciences. The Faculty research is internationally recognised for its quality and diversity in both basic and translational aspects. It is frequently conducted in partnership with industry and/or involves collaboration with many of the world's great research institutions including Yale, the Max Planck Society, the US National Institute of Health (NIH) and the University of Zurich and aspires to have a global impact on society.

Our central London location has allowed us to form close collaborations with other local leading Universities, Research Institutes and Colleges including King's College London, Birkbeck College, London School of Hygiene and Tropical Medicine, Royal Veterinary College, Queen Mary's College; Brunel University, the Institute of Zoology, British Museum and Natural History Museum. UCL is also the founding academic partner of the Francis Crick Institute, which is set to be one of the world's most powerful biomedical research institutes when it opens this year.

Distinctive Features / Best Practice

Cross-disciplinary and Joint Studentships

We are committed to providing world-class training and to contributing to the highly skilled work force needed for a wide range of careers in many sectors in our society. The breadth and academic excellence of our research and an outstanding working environment in the Faculty allows us to offer doctoral education in most areas of life sciences. Our emphasis however is cross and interdisciplinary research, as promoted by the Faculty research strategy and the UCL "Grand challenges" programme.

Across the faculty, there are a number of interdisciplinary doctoral training programmes [DTPs] (Wellcome Trust, MRC, NERC, EPSRC, BBSRC)) combining bioscience research with biomedicine, physics, mathematics, environmental and computational sciences. These DTPs support PhD training in strategic areas with additional professional development facilitating cross-partnership, co-operation and good practice. Research Council CASE studentships support placements in industry that provide research experience in commercial environments. Studentships provided by charities such as Diabetes UK, Alzheimer's Research UK, Fight for Sight and Parkinson's UK are also available for targeted research areas. There may also be funding opportunities through individual research grants as well as through other programmes such as those offered by UCL CoMPLEX (Centre for Mathematics & Physics in the Life Sciences & Experimental Biology).

In order to encourage interdisciplinary and cross-disciplinary ways of working, we aim always to appoint the two supervisors from different disciplines, as encouraged by our DTP allocations, to support advanced training in cross and interdisciplinary research. The Faculty is unique in providing training in Mathematics and Computational skills for Biology via the SysMIC programme to all PGR students across the Faculty.

Thesis monitoring and mentoring

To help students and supervisors pace and progress a research degree, the Faculty uses a list of Milestones and Thesis Committee (TC) format. The thesis committee has been trialed in Division of Biosciences and will be rolled out to the rest of the Faculty in 2016/2017. Each TC oversees the student progress and ensures that excellent standards of supervision, management and mentoring are maintained. The TC makes sure that each student receives in depth-advanced training, acquires broader understanding of their research area and develops transferable skills. The TC also provides a final year timeline and ensures regular checks on progress till submission. This has led to a submission rate of >77% for the last three years in our Faculty, one of the best submission rates in UCL.

Cohort building and student engagement

The Faculty has an active Staff Student Consultative Committee (SSCC), which meets with Graduate Tutors four times a year to solve academic or pastoral care concerns. This informs the development of PhD research strategy in the Faculty. As a result of request from students we have introduced a “buddy scheme” where each new PhD student is paired with a senior PhD student on the day of induction. The Faculty provides opportunities for PhD students to interact with peers, both through participating in formal training and also informally through parties and social events within the Faculty, encouraging cohort building. The SSCC also takes an active part in cohort building by holding regular evening meetings at which students are encouraged to present their work in the format of 3 minute presentations and at which specialists provide expert advice on generic skills such as research integrity, scientific writing, presentation skills, entrepreneurship, careers and knowledge transfer skills. All these activities are having a very positive effect on the development of research training in the Faculty.

Leadership development

Through a committee selected by the students, an annual symposium is held to celebrate the research being conducted by the students in the Faculty. This also helps to develop the leadership qualities of students involved in organizing the programme, refreshments, poster assessment and prize awards. Supporting students to organize student led seminars, thesis committee meetings, public engagements, outreach activities, undergraduate teaching, communication and transferrable skills further augments leadership skills.