



UNIVERSITY OF
OXFORD

To train Scientists strong in Translational Research

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Traditional research tends to adopt a purely scientific approach but often neglect the practicability in the real applied world. Translational research emphasises on bringing questions from the bedside to the bench and back to the bedside with answers for clinical utilisation.

For biomedicine and health sciences, the ultimate aim of research, and hence PhD education in the discipline, is to unravel the aetiologies and pathogenesis of human diseases; in the process, to discover new ways or improvements to diagnose, prevent and treat diseases which plagued the human race.

The emphasis on translational research in PhD education is proposed (refer to flow chart). It should allow an individual to acquire skills to target questions arising from the management of patients, translating them into investigations employing sound and rigorous scientific principles, with the outcome having a significant practical impact on the management of patients. This could be achieved by introducing clinical exposure in the form of clinical work for clinicians and clinical sessions for non-clinicians in areas pertinent to their projects during the PhD training, in addition to acquisition of foundational research skills.

To ensure the success of the PhD programme in biomedicine and health sciences, close collaboration with various academic institutions and their affiliated hospitals including bioethical and medical regulatory bodies would be necessary to support the clinical training required and the access to materials pertinent for the PhD candidates' research projects.

Selection of PhD candidates:

- Academic potential of applicants
- Clear proposal of the subject area of interest for PhD project must be provided by applicants into the programme
- For clinicians, the choice to continue clinical work in a particular speciality related to their research interests must be specified

Short-listing of candidates and matching of potential supervisors

- Institutions to affirm clinical training for clinicians and clinical sessions necessary for PhD candidates whose projects will benefit from them. In addition, supervisors should have sorted out any applications relevant to the project with the bioethics committee and regulatory bodies

1st year of PhD (Probation Research Student)

- Acquisition of basic laboratory techniques and introduction of translational research (common to all in the disciplines as didactic lectures) (1st 3 months on embarking of PhD course)
- Learning of specific skill sets relevant to individual projects (candidates should be embarking on their projects) (throughout PhD years)/ Journal clubs
- Clinical work once per week for clinicians/ clinical sessions (if necessary) for non-clinicians (emphasis on purposes of research and importance of translational research)
- Regular meetings/progress reports with supervisors
- Attend scientific/medical conferences and other relevant skill courses
- Preparation of transfer report by end of 1st year or beginning of 2nd year of PhD course

2nd year of PhD (Confirmation of PhD Candidature)

- Submission of transfer report and subsequent confirmation of PhD candidature
- Continuation of clinical work for clinicians once per week
- Continuation of project
- Attend scientific/medical conferences, submission of work for presentations at conferences and other relevant skill courses (e.g. grant writing, clinical trials designs)
- Journal clubs /meetings with supervisors and research group

Final Year of PhD

Submission of Thesis/Viva

