MSD Statement of Provision for Graduate Research Students in the Medical Sciences Doctoral Training Centre (MSDTC)

4-year DPhil programme in Structural Biology

1. What arrangements will be put in place for supervising the graduate's work?

Rotation year:

Supervisors are formally assigned to students following confirmation of rotation year research projects. Programme directors and the MSDTC Director also have a supervisory role.

During DPhil:

You will have a named supervisor or supervisors, with overall responsibility for the direction of your work on behalf of your department. Your supervisory team will include:

- your supervisor
- Departmental Director of Graduate Studies
- senior members of research staff within your laboratory
- Departmental advisor(s)
- the Structural Biology programme directors
- the MSDTC Director

You should expect to have a one to one formal meeting with your primary supervisor at least once a term where your research and progress will be reviewed and the contents of the termly submitted supervision report discussed and agreed. You should also have more frequent meetings with a member of your supervisory team.

2. What induction arrangements will be made?

The main induction to the Department of Biochemistry is provided at the start of the first term and it is a requirement that students attend this. Supervisors will arrange more specialised inductions subsequently and in particular where research is carried out in other departments. There are induction events for the MSDTC and Medical Sciences Division in the first term.

3. What workspace will be provided?

Workspace will be related to individual circumstances. If undertaking experimental work, you will be provided with bench space in a laboratory. If undertaking theoretical research, you will have shared office space.

4. What IT support/library facilities/experimental facilities will be available?

You will have access to:

- the Department of Biochemistry's IT support and the University Computing Services University
- Library services such as the Radcliffe Science Library and the Cairns Library
- experimental facilities as appropriate to the research topic.

The provision of other resources specific to your project should be agreed with your supervisor as a part of the planning stages of the agreed project.

The Department of Biochemistry has in-house research facilities, (e.g. DNA and Protein sequencing, NMR, X-ray diffraction, crystallization, biophysical analysis, analytical ultracentrifugation, FACS analysis, electron and imaging microscopes) and access to remote facilities at the Rutherford Appleton Laboratory, (<u>http://www.stfc.ac.uk/about-us/rutherford-</u>

<u>appleton-laboratory/</u>), DIAMOND Light Source (<u>http://www.diamond.ac.uk/Home.html</u>), (Harwell Science and Innovation Campus near Didcot, Oxfordshire).

5. Which research seminars will be available?

Students will have access to the seminars that individual research groups or groups with common areas of interest organise for their own members and others. The Department of Biochemistry provides regular seminars on the following topics: Molecular and Cellular Biochemistry (Departmental Colloquia), Molecular Biophysics, Structural Biology, Glycobiology & Virology, Immunochemistry, Computational Biology and Structural Bioinformatics, Microbiology (Molecular Genetics), Developmental Genetics, Chromosome Biology. Students will also have access to other departmental seminars and colloquia.

6. What access to research funds will be available?

There are 5 Wellcome Trust Studentships available to be awarded on this programme. These studentships include allowances for research consumables, training and travel to conferences.

7. What formal graduate skills training will be provided?

Students will have the opportunity and are strongly advised to attend a variety of skills training sessions offered by the MSDTC programmes and the Medical Sciences Division, covering transferable and research skills. Details of courses will be emailed via the MSDTC:

http://www.medsci.ox.ac.uk/skillstraining

A portfolio of online training courses is available via this site, as is the Research Skills Toolkit, which suggests tools, tips and techniques to support researchers in their work.

The Structural Biology programme will include training in the following areas during the rotation year:

- X-ray crystallography
- NMR
- Electron microscopy
- Computational Biology
- Imaging
- Protein production

The Department of Biochemistry provides research-specific training e.g. taught courses available to Research Students. Additional courses can be accessed, which are provided in collaboration with other departments. Those changing fields or in need to fill in background or core mathematics and data handling training can freely access undergraduate courses, also listed below, provided they notify by email <u>dgs@bioch.ox.ac.uk</u>

Molecular and Cellular Biochemistry

Basic Level http://www.bioch.ox.ac.uk/aspsite/index.asp?sectionid=undergrad http://www.bioch.ox.ac.uk/timetable.asp Biological Physics and other courses Mathematics and Statistics for Biochemists

Part I Structure & Function of Macromolecules Energetics & Metabolism Molecular Biology & Genetics Cell Biology & Integration of Function Data Handling Ethics in Biotechnology

Masters Level (Part II) Courses Bionanotechnology Membrane Transport Neuropharmacology Signaling and Coordination in Plants Virology, Structural Proteomics

DPhil Level Research Methods Molecular Biology Computational Methods X-ray Crystallography Primer Biophysical Methods, Electron Microscopy NMR Primer Advanced X-Ray Crystallography Advanced NMR Research Techniques Day (organised by the Dunn School of Pathology in collaboration)

8. What opportunities will be available for developing and practising teaching skills (for second and third year graduates)?

The University supports the development of research students who wish to follow an academic career, including training in teaching skills. Information about the Division's 'Preparation for Academic Practice' activities can be found at http://www.medsci.ox.ac.uk/skillstraining

The Department of Biochemistry provides Graduate teacher-training courses and resources. There may also be opportunities for training for laboratory demonstrating, to demonstrate in practical classes, to take problem solving classes in Biological Chemistry, Mathematics and Biophysical Chemistry, and to undertake tutorial teaching in colleges.

9. What arrangements for accommodation, meals and social facilities, will be made, on a year round basis?

Department: Students can use the department cafeteria on the Department of Biochemistry site. This encourages interaction between research groups in the department. Departmental seminars and colloquia bring students together with academic and other research staff in the department to hear about on-going research, and provide an opportunity for networking and socialising.

College: Many colleges will be able to provide you with at least one year's accommodation. Generally speaking your college will provide meals throughout the year, but provision will vary from college to college, especially during vacations, and you will need to familiarise yourself with your college's detailed arrangements. In addition there are usually self-catering facilities available in graduate accommodation. You will be a member of the Middle Common Room (MCR), or equivalent, of your college, which is the main social centre for graduates. The MCR provides a common room and usually organises a programme of social events throughout the year. The college will also provide a bar, some computing facilities and a library, and may often have dedicated funds for research (conference and field grants). It also represents the interests of its members to the college through an elected Committee or through elected representatives to College Committees. Again, details will vary from college to college. Graduates are also welcome to participate in all other social and sporting activities of the college. Please see individual college websites for further details about all aspects of college provision.

Central: Graduate Research Students may become members of the University Club in Mansfield Road, and participate in the range of sporting activities provided by the University.

10. What arrangements are in place for pastoral and welfare support?

Department: Within your host Department, your supervisor and Director of Graduate Studies are available to offer support. The MSDTC Director and Administrator and the programme directors are also able to offer support. Student views and concerns can be communicated to the Department, the MSDTC and/or the Divisional Graduate Joint Consultative Committee.

College: There is an extensive framework of support for graduates within each college. Your college will allocate to you a College Advisor from among its Senior Members, usually in a cognate subject, who will arrange to see you from time to time and whom you may contact for additional advice and support on academic and other matters. In college you may also approach the Tutor for Graduates and/or the Senior Tutor for advice. The Tutor for Graduates is a fellow of the college with particular responsibility for the interests and welfare of graduate students. In some colleges, the Senior Tutor will also have the role of Tutor for Graduates. Each college will also have other named individuals who can offer individual advice. The University also has a professionally staffed confidential Student Counselling Service which offers assistance with personal, emotional, social and academic problems.

Central: The University provides a Student Counselling Service (http://www.ox.ac.uk/students/welfare/counselling) and Careers Service (http://www.careers.ox.ac.uk/).