



Double PhD in Biomedical Sciences and Biotechnology

Faculty of Health and Life Sciences, University of Liverpool, UK

Faculty of Medicine, Chulalongkorn University, Bangkok, Thailand

Programme Handbook

2023/24

1. Welcome to new postgraduate research students

Welcome to the Double PhD programme in Biomedical Sciences and Biotechnology, which is run jointly between Chulalongkorn University, Faculty of Medicine and the University of Liverpool, Faculty of Health and Life Sciences.

The University of Liverpool is probably unique in having the largest concentration of bioscience departments and researchers in the UK. Research in the Faculty of Health and Life Sciences is organised into research institutes, each specialising in different aspects of biomedical research. These include the Institutes of Integrative Biology (IIB); Translational Medicine (ITM), Ageing and Chronic Disease (IACD), Infection and Global Health (IGH) and Psychology, Health and Society (IPHS). In addition, we have close research links and many collaborative projects with the Liverpool School of Tropical Medicine. This research spans the complete range of biological scales from genes and genetic regulation through proteins, post-translational modification and cellular function to whole organisms, populations and ecosystems. We use state-of-the-art "omics" technologies to generate large data-sets and we develop new mathematical and computational models to make sure we can fully exploit these data. Your supervisors at Liverpool will be based in at least one of these institutes (details on pages 6 and 7).

The Faculty of Medicine at Chulalongkorn is the second oldest medical school in Thailand, and was established in 1947 in accordance with the wishes of King Ananda Mahidol to educate sufficient numbers of medical doctors to satisfy public demands. For more than half a century, this medical school has provided more than 5,000 medical doctors. Each year, the school accepts about 300 medical students and more than 100 for postgraduate residency trainees and also has many active research programmes. It has been ranked as one of the best medical schools in Thailand in 2016. It comprises the Departments of: Anatomy, Anesthesiology, Biochemistry, Forensic Medicine, Internal Medicine, Laboratory Medicine, Microbiology, Obstetrics and Gynecology, Ophthalmology, Orthopaedics, Otolaryngology, Pediatrics, Pathology, Parasitology, Pharmacology, Physiology, Preventive and Social Medicine, Psychiatry, Radiology, Rehabilitation Medicine and Surgery. It also houses the following centres of Excellence: Cardiac Center, KCMH; Chula Clinical Research Center - ChulaCRC to perform clinical studies with ICH-GCP standard ; Chula Medical Research Center (Chula MRC) which is fully equipped for basic research in the biomedical field; Chulalongkorn Comprehensive Epilepsy Programme (CCEP) under the patronage of Professor HRH Princess Chulabhorn; Chulalongkorn Comprehensive Movement Disorders Center; Chulalongkorn Craniofacial Center; Chulalongkorn Excimer Laser Center; Family Medicine Center, KCMH; Information Center for Emerging Infectious Diseases; Glaucoma Imaging & Diagnostic Center; Liver Transplant Center; Surgical Training Center; The Queen Sirikit Center for Breast Cancer, KCMH; Wellness Center. Recently, an Excellence Center for Advanced Therapy Medicinal Products (EC-ATMPs) for tissue engineering has been developed, a 3D Bioprinting centre and stem cell research is being launched in the Faculty of Medicine for Regenerative Medicine.

As a student on this double PhD programme, you will undertake a project that will be jointly supervised by academic research staff at both institutions on a jointly-designed project. You will spend a minimum period of study at each institution of 6 months, at a time that is decided upon by your supervisors. The timing of this period of research will depend on the nature of your project and the point in your training that will provide you with the maximum benefit. In order to obtain this double PhD, you will have to satisfy the progress requirements of both institutions, and these are detailed in the following pages of this handbook. Where possible we have aligned the procedures of both institutions to make this as straightforward as possible for you. Therefore, it will not matter if your training is at Chulalongkorn or Liverpool, you will receive a very similar experience.

This Handbook has been prepared to assist you during your programme. The contents of this Handbook were correct at the time of printing, but current versions of this handbook and other documents will always be found, in electronic format, at the indicated links and you are encouraged to always consult these.

Most communication to students is now through email and so check your emails on a regular basis otherwise you will miss important information. You will receive emails on both your Chulalongkorn and Liverpool email accounts and so please make sure that you check these regularly!

We aim to make this handbook useful to postgraduate research students. If you have suggestions for additions, clarifications or deletions, please email them to <u>s.w.edwards@liv.ac.uk/gradmedcu@gmail.com</u>

2. Key Contacts

Your principal supervisor(s) will be your main point of contact throughout your research degree. You must keep in regular contact with both your Chulalongkorn and Liverpool supervisors and co-supervisors. Additionally, you will be in regular contact with the Programme Management Team, which comprises Academic and Professional Services staff from both Institutions:

Programme Directors	Professor Sunchai Payungporn (Chair)	Chulalongkorn
	Professor Steven W Edwards (IIB)	Liverpool
Members	Associate Professor Chanchai Sittipunt Dean of Medicine	Chulalongkorn
	Dr. Neil Blake (IGH) Faculty Director of PGR	Liverpool
	Professor Nattiya Hirankarn Associate Dean for Graduate Affairs	Chulalongkorn
	Assistant Professor Chalisa Louicharoen Cheepsunthorn Assistant Dean for Graduate Affairs	Chulalongkorn
	Professor Apiwat Mutirangura Professor Kanya Suphapeetiporn Assistant Professor Direkrit Chiewchengchol Assistant Professor Chutitorn Ketloy	Chulalongkorn
	Professor Luminita Paraoan (IACD) Professor Carlo Palmieri (ITM) Dr Shankar Varadarajan (ITM)	Liverpool
Professional Services	Ms Pinthorn Ngamrungsiri (gradmedcu@gmail.com)	Chulalongkorn
	Ms Lisa Crimmins (crimmins@liverpool.ac.uk)	Liverpool

The Programme Management Team

This team has overall responsibility of the Programme, including:

- To ensure compliance with University PGR policies and regulations;
- To cover all matters that would be raised at a Staff-Student Liaison Committee that were generic to this programme;
- To monitor and review all aspects of PGR programme delivery, including the production of annual reports;
- To define and manage PGR admissions policy and procedures, in line with faculty procedures;
- Via representatives, to provide input regarding Institute/Faculty/University resources (for example: library facilities, research facilities);
- To ensure good communications between students, academics and professional services colleagues;
- To consider arrangements for PGR student and supervisor training, in line with Faculty and Institute policies;
- To consider the results of Postgraduate Research Student surveys and report issues to Institute Committees as appropriate.
- Ensure that recruitment of students fits with Faculty/Institute research strategy

3. General Information

What should I expect from my PhD training?

In the UK, the reference point for standards of University degree awards are described in the *Framework for Higher Education Qualifications in England, Wales and Northern Ireland* (see <u>www.qaa.ac.uk</u>), and the University of Liverpool uses this framework to set its own standards and expectations of students and supervisors (<u>https://www.liverpool.ac.uk/aqsd/academic-codes-of-practice/pgr-code-of-practice/)</u> PhD degrees are awarded to students who have demonstrated:

Table 1. Expected Learning Outcomes (ELOS) with Level of Bloom's Taxonomy					
Ph.D.	Level of Bloom's	Generic or			
	Taxonomy	Specific			
1. Identify, interpret, and critique relevant literature in Biomedical Sciences and Biotechnology	AN	S			
2. Develop a novel research question by applying forefront knowledge in the relevant field of Biomedical Sciences and Biotechnology	C	S			
3. Design research proposal by integrating advance knowledge and forefront technologies in Biomedical Sciences and Biotechnology	С	S			
4. Uphold the international ethical, scientific, and practical standards and regulatory requirement	A	G			
5. Demonstrate proficiency in the skills needed to conduct Biomedical Sciences and Biotechnology research, to manage project, to collaborate constructively with a range of regional, national and international research partners, and to deploy leadership smartly	A	S			
6. Analyze data and justify the results to make accurate conclusion of research outputs and to create new knowledge or innovative solutions in Biomedical Sciences and Biotechnology	C	S			
7. Effectively communicate medical scientific information to specialists in the field and the lay public through writing and/or oral communication	A	G			
8. Recognize the need for lifelong learning and exhibit the skills necessary to acquire knowledge by oneself	A	G			

Cognitive level of ELOs : R-Remembering, U-Understanding, A-Applying, AN-Analyzing, E-Evaluating, C-Creating

These are the attributes and qualities that will be evaluated in your thesis and viva/thesis defence. Examiners of research degree theses will use their academic and professional knowledge and judgement to determine whether the candidate has achieved these standards required for the award to be made. Your training will therefore consist of formal, core coursework, optional training and research work that will help you develop your subject knowledge and research skills to enable you to be able to plan, execute, interpret, analyse and present your research findings. These skills will also help you in your future research careers. Chulalongkorn University Graduate Studies Regulations are compliant with the Thai Qualifications Framework for Higher Education, Bureau of Higher Education Standards and Quality (http://www.mua.go.th/users/bhes/)

What are the research interests of the two Universities?

Information about the research activities of the two Faculties is available on the following websites:

Chulalongkorn University, Faculty of Medicine (http://en.md.chula.ac.th/) Research Affairs, Faculty of Medicine (http://rs.md.chula.ac.th) CU systems Biology Center (http://www.sysbio.chula.ac.th) Chula CRC Clinical Research Center (http://www.chulacrc.org) Information Center for emerging infectious disease (http://www.cueid.org/) (WHO collaboration centre for research and training on viral zoonoses

University of Liverpool, Faculty of Health and Life Sciences

Institute of Integrative Biology: https://www.liverpool.ac.uk/integrative-biology/research/

Institute of Infection and Global Health: https://www.liverpool.ac.uk/infection-and-globalhealth/research/ Institute of Translational Medicine: https://www.liverpool.ac.uk/translationalmedicine/research/ Institute of Ageing and Chronic Disease: https://www.liverpool.ac.uk/ageing-and-chronicdisease/research/ Institute of Psychology, Health and Society: <u>https://www.liverpool.ac.uk/psychology-health-</u> and-society/research/

How is the programme structured?

Students may be recruited to this double PhD programme from either institution, but it doesn't matter where you start or when you spend time at the other institution. The training programmes at both institutions are very similar although they are organised in slightly different ways. For example, the programmes at Liverpool and Chulalongkorn both contain training (via modules or courses) and project work, and while at Chulalongkorn this is organised into credits, this is not the case at Liverpool. You will spend broadly the same amount of time undergoing training and project work at both institutions.

For Chulalongkorn there are two schemes available to students. as follows:

Scheme 2.1: students with a master's degree shall take courses of at least 12 credits in total and produce a dissertation worth not less than 36 credits.

Scheme 2.2: students with a bachelor's degree shall take courses of at least 24 credits in total and produce a dissertation worth not less than 48 credits.

Program Structures	Credits
Scheme 2.1	
Total required credits	48
Coursework credits	12
 Core course credits 	6
 Elective course credits 	6
Dissertation credits	36
Scheme 2.2	
Total required credits	72
Coursework credits	24
 Core course credits 	8
 Elective course credits 	16
Dissertation credits	48

Table 1. Entrance for students with and without a masters degree

The structure of the programme, and the pathways at Liverpool and Chulalongkorn are shown in Table 2. Note also, that there are a series of assessments that you need complete (in addition to the assessments of the coursework) that are shown in blue. These will be explained later in this handbook, but as you will see, we have aligned these assessments so that the assessment of one institution is equivalent to the other.

University of Liverpool	Chulalongkorn University		
	Scheme 2.1	Scheme 2.2	
Core Training	Required (Core) Modules (6 credits):	Required (Core) Modules (8 credits):	-
3 Month Report			
(usually 3 x M-level modules)	Research Skills in Biomedical Sciences and Biotechnology (3 credits)	Research Skills in Biomedical Sciences and Biotechnology (3 credits)	
Additional Skills Training- see examples later in this Handbook	Fundamental Biostatistics in Clinical Science Research (3 credits)	Fundamental Biostatistics in Clinical Science Research (3 credits)	1 st Yr
	Doctoral Dissertation seminars & Individual Development (0 credits)	Doctoral Dissertation seminars & Individual Development (0 credits) Seminar I & Seminar II (2 credits)	
Project work	Elective courses- see lists (6 credits)	Elective courses- see lists (16 credits)	
Progress Report 1	Qualifying Examination and/or Thes		
Portfolio of Activity	(Students are entitled to take a qualifying gained consent from the Graduate		
Project work	Dissertation (12 credits)	Dissertation (16 credits)	
Additional Skills Training	Doctoral Dissertation seminars & Individual Development (0 credits)	Doctoral Dissertation seminars & Individual Development (0 credits)	2 nd Yr
Progress Report 2	Thesis Proposal		1
Portfolio of Activity			
Project work	Dissertation (12 credits)	Dissertation (16 credits)	
Additional Skills Training	Doctoral Dissertation seminars & Individual Development (0 credits)	Doctoral Dissertation seminars & Individual Development (0 credits)	3 rd Yr
	Thesis Plan		1
Project work	Dissertation (12 credits)	Dissertation (16 credits)	
	Doctoral Dissertation seminars &	Doctoral Dissertation seminars &	4 th
Additional Skills Training	Individual Development (0 credits)	Individual Development (0 credits)	4 th Yr
	Thesis submission		

How are my project and project supervisors/advisors chosen?

We can only provide projects in a research area that is of interest to research staff at both Chulalongkorn and Liverpool and we aim to identify projects in which the Chulalongkorn/Liverpool partnership provides added value to the training. For example, it is usual for the staff at Chulalongkorn and Liverpool to have complementary expertise in research interests and technologies. In this way, you can benefit from this combined expertise and wide range of technologies. **Students should not approach potential supervisors directly at either institution unless specifically told to do so**: the Programme Management team will be responsible for identifying supervisors once the project area has been identified.

How much time will I spend and Liverpool and when?

Students must spend a minimum of 6 months at each institution. You may spend longer than this period, but this must be agreed with the Programme Management Team and your supervisors. The timing of the exchange will depend on the project and the benefits that the time away will bring. This is normally defined in the offer letter, but this may change as the project develops. If the original time of the visit is changed, you must officially request this change (via the Programme Management Team) in order to issue you with the appropriate documentation to obtain a visa.

How long will the programme take?

You must submit your thesis with 4 years of registration on the programme at Liverpool, if you are studying full time. The minimum time period to submit your thesis is 2 years of full time study. You will need special permission to register as a part time student. You will submit a single thesis, that will satisfy the requirements of both institutions (see later).

4. Getting started: registration, induction and accessing University systems

How do I register at Chulalongkorn?

After being accepted as a PhD student, the student has to access <u>http://www.reg.chula.ac.th</u> to obtain a student ID number. The formal orientation programme is organized by the Graduate School, Chulalongkorn University followed by program orientation by Graduate Affairs, Faculty of Medicine, Chulalongkorn which will also assist new students regarding entrance registration. A CU account will be assigned for each student to register personal data with Office of the Registrar and online course registration. See also <u>http://www.inter.chula.ac.th/inter/internationalstudents/howtoregister.htm</u> for guidelines of online registration.

International students are required to hold an international ID card which is authorized by the Office of International Affairs, Chulalongkorn University . (http://www.inter.chula.ac.th/en/)

How do I register with Liverpool?

Once you have been accepted onto the double programme (usually after an interview with the Programme Management Team and your supervisors at Chulalongkorn and Liverpool, the latter by Skype), you must officially apply on-line to the University of Liverpool. The details of this process are found on

https://app.hobsons.co.uk/AYApplicantLogin/fl_ApplicantLogin.asp?id=liv& ga=2.57631914.1464251467. 1530769771-885640856.1499763216

and as part of this application process you may be required to submit notarised copies of your qualifications, including your English language qualifications. You must always discuss this application with both the Chulalongkorn/Liverpool Programme Management team before finally submitting the application. This is to ensure that your application form is completed properly and that it can be directed to the appropriate staff at Liverpool.

How do I activate my UoL account and access Liverpool Life?

Following receipt of your offer letter and registration form (sent out by the PGR team at the University of Liverpool), your student ID number will be generated allowing you access to your University of Liverpool computing account and Liverpool Life. To activate your computing account and access Liverpool Life, all you need is your University of Liverpool ID number which you should enter along with your name and date of birth using the following website http://www.liv.ac.uk/activate. You will be asked a security question: please remember the answer to this!

Once notification is received, you should login to Liverpool Life, by entering the URL liverpoollife.liv.ac.uk into your browser. You should follow the instructions to gain access and create a password. When you do this, you will also be able to access the library resources and emails etc.

How do I access and input into my student records?

Liverpool Life is the online portal that provides access to your University of Liverpool student record. This enables you to update important information such as your contact details, view information about your course of study and apply for changes to your registration status.

Liverpool Life is especially important to doctoral students as it is where the PGR Toolbox is located. This is the system used to record your progress through your doctoral programme, such as your supervisory meetings and other training, and professional activities that you have undertaken during your research. This is also where you will complete your Annual Progress Report, which is used to assess whether you can progress to the next academic year.

What should I do if I forget my PIN?

If you have previously used Liverpool Life but have forgotten your PIN, you should enter your student ID in the field provided and click 'Forgot PIN'. The system will prompt you to enter the answer to the security question that you set up when you first used Liverpool Life. Assuming that you answer the question correctly, you will be able to reset your PIN to a new value.

What do I do if I have problems with this system?

If, after following the procedure above and answering the security question, you are still unable to log in to Liverpool Life, you may email the Liverpool Life Enquiry Team at spipin@liv.ac.uk.

For problems activating your computing account you can contact helpdesk@liverpool.ac.uk.

Is there an induction to the programme?

Besides the general orientation at University level, new graduate student orientation at Chulalongkorn is annually held in July by The Division of Graduate Affairs, Faculty of Medicine. Partnership students (from Liverpool) attend (to advise with subsequent study at Liverpool) and the regulations of the Graduate School and Graduate Affairs, Faculty of Medicine are explained, including information on the Quality Assurance Policy that all students need to complete via an online course evaluation (Chulalongkorn University Curriculum Administration System: CU-CAS). Guidance materials regarding resources and publication ethics are also provided. There is also a social event for all new students.

In October, Institutes at Liverpool hold an Induction Day for all new postgraduate research students attended by the Head of Institute, Institute Manager, Institute Director of Postgraduate Research and other staff members. The purpose is to welcome students to the Institute and become familiar with the research environment. It provides important information on procedures for training, Supervisory Meetings and assessment that will operate throughout the PhD degrees. This day will also cover matters of general safety, including biosafety and risk assessment that operate within the Institute. Representatives of the University's PGR Student Team and PGR Development Team will be present. There is usually a social event at the end of the day.

Students can commence a postgraduate research degree on the first of any month of the year, and a significant number of postgraduates begin in months other than October. Individual inductions to the University, the Institute and the degree programme are given to these students. They also receive a personal safety induction and are directed to further initial resources and training as appropriate. Students are provided with several documents at induction, including this Handbook, Liverpool Doctoral College Handbook, Induction Checklist and a Development Needs Analysis form (see later).

5. Supervisors and training

What is the role of my supervisor and how will they help me?

The first few weeks of your registration with the University of Liverpool and Chulalongkorn are an extremely important time for establishing how the supervisory relationship will work with your supervisory team, and in particular with your principal supervisor at each institution. You will need to agree with your supervisors how you wish to undertake your supervisory meetings, how they will review your progress and what form of feedback will be the most productive to help you to submit a successful PhD thesis at the end of the programme. The supervisory relationship should be based on honesty and mutual understanding, and your early discussions with your principal supervisor will form the basis for this.

You will have at least two supervisors for your research project: one at Chulalongkorn and one at Liverpool. However, for academic benefit, a student should also have maximum of two co-supervisors from each University.

Should you encounter any difficulties at any stage of your studies at either University, you can raise them directly with your principal supervisor during your regular meetings, or more formally as part of the Record of Supervisory Meetings (within the PGR Toolbox) and Annual Progress Report (APR) processes. It is important for any problems to be addressed as early as possible. For example, it is much more difficult to respond to complaints about supervision after the examination of the thesis. The University of Liverpool's Code of Practice for Research Supervision can be accessed at http://www.liv.ac.uk/student-administration/research/pgr-code-of-practice/a-z-policies.

How frequently should I formally meet with my supervisors?

You may well meet informally with your supervisors very frequently, but you must formally record Supervisory meetings via an electronic system that is accessed through Liverpool Life. It is the responsibility of the student to initiate these meetings which are recorded via the PGR Toolbox, and are reviewed and signed off by the supervisor(s).

These meetings must be approximately every month i.e. 12 each year until the award of the degree after the *viva* examination (Thesis Defence). The PGR Toolbox software within Liverpool Life (<u>https://student.liv.ac.uk/</u>) is the system used to record these meetings. The existence of these meetings (whether initiated by the student or signed-off by the supervisor) can be seen by the Institute Director of Postgraduate Studies (IDPR) and central PGR administrators, and are a requirement for Annual Progression.

Meetings should be formally planned and recorded in the Record of Supervisory Meetings section of the PGR Toolbox. There should also be at least one formal meeting with the whole supervisory team per term, which may be via Skype. It is expected that, in most cases, students and supervisors will meet more frequently than the minimum requirements and will make some informal record of their meetings. The recording of Supervisory Meetings using the PGR Toolbox should be undertaken contemporaneously and not completed summarily at the end of the year. Supervisors will receive monthly emails about the record of Supervisory Meetings. The default setting is for the primary supervisor to sign-off meetings but s/he can change the settings so the secondary supervisor signs-off.

The University acts as sponsor for students from outside the European Economic Area with a Tier 4 visa and has a statutory responsibility to monitor engagement with their research programme, including interactions with their supervisors. Completion of the record of Supervisory Meetings by international students studying at Liverpool is one means for this. Failure to engage with the record of Supervisory Meetings is likely to lead to the University considering that a student is not engaging appropriately with their programme and could lead to the University's withdrawal of sponsorship of the student and to termination of studies.

Further policy detail in the *PGR CoP Appendix 3: Policy and Procedures on Academic Progress of Postgraduate Research Students,* Section 3 (https://www.liverpool.ac.uk/media/livacuk/tqsd/code-of-practice-on-assessment/appendix-3-PGR-CoP.pdf)

Practical information about the Supervisory Meetings software and contacts for problems are at:

http://pcwww.liv.ac.uk/~pgro/ToolboxGuides/supervisormeetings.html

http://www.liv.ac.uk/pgr-development/annual-progression/supervisory-meetings/

Apart from my research training, will I receive help to develop other skills?

The newly launched Liverpool Doctoral College (LDC) (www.liv.ac.uk/intranet/doctoral-college/) is the home for all doctoral training and development across the University of Liverpool. The LDC offers a choice-led approach allowing you the flexibility and freedom to tailor your development programme to meet your needs, circumstances and aspirations. The LDC aims to deliver a tailored package of skills and careers development, ensuring you have the skills needed firstly, to successfully complete your research and secondly, to meet the expectations of future employers. Your tailored development programme should help you develop as a postgraduate researcher and entrepreneur in your own right. These training needs should be discussed with your supervisors and the Programme Management Team.

What Personal and Professional Development (PPD) Training will I get?

This is offered at both Universities and will provide you with opportunities to enhance your skills via training which fits into one or more of the following themes: Methods, Communication, Impact, Ethics and Governance, Employability and Entrepreneurship.

Core Training is offered by your School or Department to help develop your knowledge base and skills within your chosen discipline, inter-disciplinary or multidisciplinary area. This core training is described in Tables 3 and 4. All students are also required to participate in and complete the *Personal and Professional Development* (PPD) Training (also known as the PGR Development Programme). This provides you with opportunities to acquire generic and specific research skills to enhance your research and your overall employability. It also contributes to the research environment by facilitating networking and interdisciplinary teamwork activities.

How do I record my training?

You are personally responsible for tracking your participation in these training events, and ensuring that they are recorded in your PGR Portfolio of Activity online. For certain workshops, attendance will also be tracked by the Graduate Studies Office. Completion of skills training will also be reviewed as part of the Annual Progress Report process. An example of a completed Portfolio of Activity is show in Appendix 1.

6. Personal and Professional Development Training and Core Training

University approach to postgraduate student training

With the introduction of the Liverpool Doctoral College in 2015 it has been agreed that a flexible, choice led approach to PGR development should be introduced. Development needs will be identified through a Development Needs Analysis (DNA), led by the Primary Supervisor, during which the student and supervisors should agree what training should be undertaken.

Personal and Professional Development (PPD)

Information on Personal and Professional Development (PPD) training offered by the Faculty/ University is available at https://www.liverpool.ac.uk/intranet/doctoral-college/development/

Core Training

Core Training is the term used to describe the discipline-specific and training that you must undertake. However, there are other opportunities to obtain training in areas or skills that will be helpful to your PhD studies or future careers. To get the most out of the training on offer, you should complete a Development Needs Analysis with the Primary Supervisor at the start of the programme and review the DNA on a regular basis. Through the DNA, you may identify gaps in your skills or knowledge base that by addressing them will aid the progress of their research project.

All PhD students must take M-level modules (or equivalent) of training to support their research project. The choice of modules will depend on your project, background and place of training (Chulalongkorn or Liverpool). This training is generally taken during the first year of study but may be taken later if appropriate. The majority of modules are taken in the first year of study and examples of the available modules are shown in Tables 2 and 3. Some modules may be taken in later years, depending on the training needs of the student and the project. Training should be selected after discussion with supervisors and agreed with the Programme Management team.

Additional Training

These are listed in Table 4. This may include Demonstrator training, Research Ethics,

Module code and Description	Semester	Credits
LIFE721 Informatics for the Life Sciences	1	15
LIFE621 Off-campus version		
Introduces major areas of informatics and what they can do for you. Introduces you to staff in IIB expert in these areas, and to current PhD students who are using particular tools in their projects. Registration required. See full details via Liverpool Life/Vital. Taking this module required before taking LIFE708 Post-genomics Bioinformatics in Semester 2.		
LIFE731 Research Methods and Applications in Biological Sciences	1 and 2	15
LIFE631 off-campus version		
Includes training in scientific writing styles, ethics, experimental design & hypothesis testing and industrial applications. Select further topics from proteomics, genomics, modelling, meta-analysis, transcriptomics and microarrays, advanced microscopy, molecular ecology. Registration required. Assessments. Can be taken off-site via the internet. See full details via Liverpool Life/Vital.		
LIFE707 Advanced Statistics for Biological Research	1	15
LIFE607 Off-campus version		
Advised for those who already have some familiarity with statistics. M-level statistics recommended for those with prior knowledge of statistics and experimental design. Includes introduction to the R programming language. Delivered primarily through on-line self-learning and optional support workshops. Registration required. Assessments. Can be taken off-site via the internet. See full details via Liverpool Life/Vital		
LIFE763 Statistics for Biological Research	1	15
Off-campus version also available		
Advised for those who have little knowledge of statistics and need to learn more. Introduces software package. Registration required. Requires attendance		

at lectures and workshops as well as online material.		
LIFE733 Programming for Life Sciences	2	15
Based on perl. Useful for those who want to write their own scripts and/or analyse large datasets. Registration required. Requires attendance at lectures,		
workshops, assignments and exams. See full details via Liverpool Life/Vital		
LIFE708 Post-Genomics Bioinformatics	2	15
Following an overview of genome and proteome bioinformatics, select 3 topics		
from applications to protein structure & function, unusual protein structures,		
phylogeny, genomics, proteomics or 'omic data analysis. Registration required and a pass in LIFE721 Informatics for Life Sciences. Requires attendance at		
lectures, workshops, assignments and exams. See full details via Liverpool		
Life/Vital		
LIFE709 Evolution and Behaviour	1	15
Using evolutionary theory to understand animal behaviour. Developing		
knowledge and understanding of the complexity of animal behaviour. See full		
details via Liverpool Life/Vital		_
LIFE713 Advanced Topics in Cell Signalling	2	15
Cellular responses to external signals – receptors, cyclic nucleotides, calcium,		
phosphorylation and the kinome. Cell strategies for processing signal		
information. Applications in biochemistry and biomedicine. See full details via		
Liverpool Life/Vital LIFE715 Advanced Topics in Molecular Medicine	2	15
	2	15
Application of molecular genetics and computational biology in the study and		
treatment of human disease; how the human genome project has resulted in		
the identification of disease-associated genes; selected diseases such as inherited metabolic disease and muscular dystrophy;		
LIFE720 Advanced Topics in Viral Disease Mechanisms	2	15
Latest research on the role of viruses as important pathogens of humans and animals; viral virulence mechanisms, immune evasion and vaccine		
development.		
LIFE722 Advanced Topics in Biotechnology	1	15
Exploitation of microorganisms and microbial processes for biotechnological		
applications; economical and ethical aspects of the development of novel		
products and environmental benefits using biotechnological processes;		
processes of antibiotic production, the use of microbes as hosts for mammalian gene products, plant biomass conversion and the uses and development of		
biosensors.		
LIFE760 Genes and Cancer	2	15
Understanding of how cancer occurs and the role of oncogenes and tumour		
suppressor genes in the development of human cancer; hallmarks of cancer		
and therapeutical strategies and limitations		
LIFE710 Professional, Employability and Research Skills	1 and 2	15

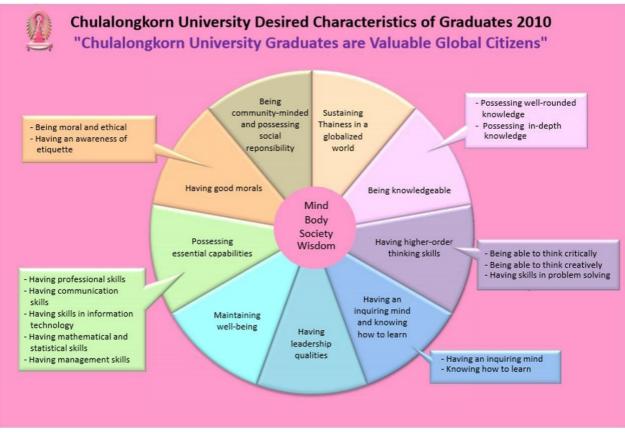
A range of personal and inter-personal skills relating to effective self-	
management and working relationships with others; enhanced ability to	
communicate effectively in academic and professional settings; skills and	
knowledge required for enhanced employability; a range of generic skills	
that will help with research planning and delivery to a professional standard.	

Table 3. Examples of Chulalongkorn University M-Level modules

Module code and Description	Semester	Credits
3000751 Research Skills in Biomedical Sciences and Biotechnology	1	3
DNA extraction, amplification, high throughput sequencing; metagenomics and		
microbiomes; epigenetics, methylome and ChIP-Seq; microarray and nanostring;		
RNA-Seq. qPCR, RNA interference; protein extraction and purification,		
proteomics, mass spectrometry; confocal/super resolution microscopy, EM; cells		
lines and culture, stems cells, flow cytometry		
3000793 Fundamental Biostatistics in Clinical Science Research	1	3
This course introduces theory and methods for statistical analysis in clinical sciences research. Topics include descriptive and inferential statistics, hypothesis testing, confidence intervals, statistics for continuous and categorical outcomes, non-parametrics, paired and matched analyses, analysis of variance, comparing multiple samples and sample size calculations. The course starts from the basic biostatistics and practices techniques that can apply to analyze data in clinical science research.		
3000752 Special Research Project in Biomedical Sciences and Biotechnology	1 or 2	3
Small research projects in biomedical sciences and biotechnology and writing a		
thesis pre-proposal.		
3000894 Doctoral Dissertation Seminar	1 and 2	0
Seminar discussions and presentation of current topics in biomedical sciences		
3000724 Individual Development	1 and 2	0
Individual Development Plan; Self-Reflection of Individual Development		
Experiences		
3000737 Scientific Publication and Presentation in the Age of Information Technology	1 or 2	1
Peer review, scientific writing, publication strategy, effective presentation		
3000790 Publication Ethics and Peer Review Process	1 or 2	1
Publication Ethics, Fabrication, Falsification, Plagiarism, Image Handling, Choosing Journals and Quality Assessment, Peer Review Process, Authorship, Conflicts of Interest, Redundant Publication, Editorial.		
3000757 Protein Expression and Purification	1	2
Protein expression in bacteria, yeast and mammalian cells. Techniques for protein purification including high throughput protein production. Chromatographic techniques such as ion exchange, size exclusion, affinity- and hydrophobic chromatography. Ultrafiltration and precipitation techniques. SDS- PAGE, western blotting, ELISA, FACS, 2D-electrophoresis and mass spectroscopy.		
3000767 Systems Biology	2	2
Introduction to systems biology; genomics and transcriptomics; proteomics and post-translational modifications; protein–DNA interactions and protein–protein		

interactions; quantitative methods in systems biology; signal processing;		
statistical analysis and data validation in bioinformatics; basic bioinformatics		
programming in Java; systems modeling; application of systems biology in		
biomedical research.		
3000755 Bioinformatics in Biomedical Sciences and Biotechnology	1 or 2	2
Preliminary bioinformatic research in biomedical sciences and biotechnology		
3000756 Current Topics in Biomedical Sciences and Biotechnology	1 or 2	1
Current topics in Biomedical sciences and biotechnology, according to the		
student's interests, with emphasis on new concepts and principles of benefit for		
future study and research		
3000757 Protein Expression and Purification	1	2
Protein expression in bacteria, in yeast, in insect cells, in mammalian cells.		
Techniques for protein purification including high-throughput protein		
production, chromatographic: ion-exchange, hydrophobic, size exclusion and		
affinity, protein isolation and caractrization: ultrafiltration, recipitation, SDS-		
PAGE, Western blotting, ELISA, FACS, and overview on 2-D gel electrophoresis		
and mass spectrometry.		
3000763 Protein Biochemistry	1	2
Protein primary Structure (amino-acids, peptide bonds), protein secondary,		
tertiary and quaternary structure, physico-chemical protein characterization,		
post-translational protein modifications, protein folding, protein sorting,		
techniques for protein purification, proteomic analysis and protein engineering		
3000764 Molecular and Cellular Biotechnology	1	2
Analysis of gene expression, gene expression profiling, analysis of protein		
expression, protein arrays, protein purification, recombinant protein expression		
in mammalian cells, monoclonal antibody production and immunological		
detection techniques using monoclonal antibodies, non-viral and viral		
vectorology, gene therapy, cloning and stem cells, transgenic animals, tissue		
engineering, and immunotherapeutics.		
3005708 Molecular Biology of the Gene	1	2
Structure, physical and chemical properties of nucleic acids. Interactions of		
proteins and nucleic acids. DNA replication, gene expression and regulation.		
Mutation, DNA damage and DNA repair. Recombinant DNA technology and		
applications in medicine		
3009747 Healthcare Innovation and Entrepreneurship	2	3
Opportunities to utilize research works to create healthcare innovation ar		
entrepreneurship scientific background and new knowledge in health innovation address challenges and develop product and services in clinical and healthcare context		
address challenges and develop product and services in clinical and healthcare contex various business tools for creating concepts and studying the feasibility of doing busine		
VALIOUS DUSIDESS TOOLS TOT CLEARING COMPANY AND STRAVING THE TEACHING AT ANING MICING		
	an	
to develop the prototype and test the market in response to users' needs; business pla based upon a novel idea and learning how to communicate a business plan to peop		

At Chulalongkorn, skills training for graduate students is available both at University and Faculty of Medicine levels to help develop the desired characteristics of Chulalogkorn University graduates.



Approved by Chulalongkorn University Council at the meeting no. 724 on June 24, 2010

More details are available at http://www.academic.chula.ac.th/CU_CAS/Desirable_Charac_2010FINAL.pdf

7. Progression from year to year

What do I need to do in each year of study?

The structure of the programme is shown in Figure 1, and outlines what you need to do in each year of study. This figure also indicates the annual progression criteria that you need to satisfy to progress from year to year. Details of the annual assessments are shown later in this Handbook.

How is my Annual Progress assessed?

To ensure you are making appropriate progress over the course of your research programme, an Annual Progress Monitoring (APM) process is used. In your first year, the APM is used to establish your ongoing registration or sometimes to transfer you to another qualification. In subsequent years, it is used to monitor your progress and normally results in your continued registration. The APM consists of three parts:

1. A written report submitted by you to an Independent Progress Assessment Panel (IPAP). You may also be asked to give an oral presentation of your research which would be part of the assessment.

- 2. A meeting (which may be via Skype) with your IPAP to determine if you have made adequate progress.
- 3. Finally, you will be required to complete an Annual Progress Report (APR) each year, which is online and is released at the beginning of June. You have until the end of June to complete the report, which then gets forwarded to your supervisor and then to the Postgraduate Director for your Institute at Liverpool.

The APR is used by the University of Liverpool to assess your overall progress. Following a satisfactory report, doctoral students are allowed to progress to the next academic year.

You will receive notification of the APR timeline along with guidance once it is released. The entries that you make form your Portfolio of Activity and the record of supervisory meetings that you have been completing during the year is fed into the APR prior to its release. Any information you put into those systems after the release of the APR will not be carried over into the report so you will have to use the free text boxes within the report to make sure all that it contains all of the relevant information.

It is important to observe the deadlines for completing the report as it must pass through a number of stages and the timing is crucial to ensuring you are registered for the following academic session. To complete the APR, you must document formal meetings with your supervisors throughout the year and complete your PGR Portfolio of Activity by the end of May each year. The Portfolio of Activity is a record of the professional and career-related activities that you have engaged in outside of your formal PGR Development Programme, including activities such as conference attendance, teaching or demonstrating duties, seminar attendance and presentations. The records should be completed in the online PGR Toolbox in Liverpool Life. This also gives you an opportunity to highlight any difficulties that you may be experiencing with your project progress or supervisory arrangements. It is therefore important that you raise any matters of concern at the time that they arise to give the University of Liverpool and Chulalongkorn an opportunity to resolve any issues that you may have. An example of a Portfolio of Activity is shown in Appendix 1

How will my training be structured?

Your programme will comprise a mixture of coursework and thesis work. There are slight differences in how this training is organised at Liverpool and Chulalongkorn, but the overall principles are the same. Your first year will contain a significant amount of coursework, but also research work towards your thesis. In later years the formal training via courses declines (but is still important) and your thesis work predominates. Figure 1 describes the course structures if you are training in Liverpool or Chulalongkorn and where the assessments/progression points align.

How will I be assessed and what do I need to do each year to progress from year to year?

Each year you will have to satisfy the progression criteria of each institute to stay on the programme. Your progress at Chulalongkorn will be monitored by the Programme Management Team, and while at Liverpool you will be assigned to two assessors, who are independent of your assessors. The assessment procedures are shown in Table 2 and detailed later in this handbook, and wherever possible we have aligned these so that a requirement of one University is equivalent to that of the other. Therefore, it doesn't matter when you spend your time at Liverpool or Chulalongkorn.

When must I complete my Annual Progress forms?

You must complete your record of supervisory meetings and the Portfolio of Activity before the start of the Annual Progress Reporting process.

At the beginning of June each year, the PGR Student Team releases the Annual Progress Report form and students are expected to complete their section and submit it to their Principal Supervisor no later than the end of June. Failure to meet this deadline could lead to you being deemed withdrawn. In the ninth or tenth month of your registration each year you will be required to produce a written report describing academic progress that you have made and attend an interview (which may be via Skype). The Progress Assessment Panel will determine whether or not adequate progress has been made.

Unsatisfactory performance identified during the APR process will be managed using the "Guide on the Academic Progress of Postgraduate Research Students" which is available at http://www.liv.ac.uk/student-administration/research/pgr-code-of-practice/a-z-policies.

For further information, please see the Annual Requirements section of the PGR Development website www.liv.ac.uk/pgr-development/annual-progression/. Further information on the APR process is available at www.liv.ac.uk/student-administration/research/progression/annual-progress/. If this does not answer your questions, you can email the teams:

- PGR Development Team at Liverpool: gssp@liv.ac.uk
- Graduate Affairs, Faculty of Medicine, Chulalongkorn : nattanun.j@chula.ac.th / gradmedcu@gmail.com
- PGR Student Team at Liverpool: pgrs@liverpool.ac.uk

8. Assessments

Research and Training Plan (Three Month Report)

The University of Liverpool requires that all full-time and part-time PhD students write a Research and Training Plan (Three Month Report) within 3 months of initial registration for the degree. It is submitted by the student to the Institute PGR Student Experience Administrator. This document consists of:

- 1-4 pages of A4 double-spaced in length
- Text agreed between student and supervisors
- Defines, but does not limit, scope of project
- Informs Assessors of nature of project (see sections 3.2.3 and 4.3 for roles of Assessors)
- Provides a brief description of how project supervision will be conducted (such as frequency of meetings) and expectations of both student and supervisors
- Accompanies the initial Development Needs Analysis with plans for Personal and Professional Development Training and for Core Training (see section 5)
- Signed and dated by student and supervisors

For further details see: *PGR CoP Appendix 3, Policy and Procedures on the Academic Progress of Postgraduate Research Students, Section 2.5* <u>https://www.liverpool.ac.uk/media/livacuk/tqsd/code-of-practice-on-assessment/appendix-3-PGR-CoP.pdf</u>

Annual Progress Review, Reports and Assessment

All PhD students are registered for one year only but will be re-registered for further years on evidence of satisfactory progress towards a thesis. There is an annual review process in the Institute and by the University.

University of Liverpool Annual Progress Review

June every year - University Annual PG Progress Report (APR) on-line forms released to all students and accessible through Liverpool Life. Students are informed by email. Completion of this form is a requirement for all full-time and part-time PhD students. Only students who have had the thesis *viva* examination or with studies suspended are exempt from this requirement.

The 'Student' stage must be completed by each student before 31st June annually.

Approval for re-registration is given after the supervisors and independent Assessors have reported on each student's progress. This should be completed before September annually.

Registration lapses if renewal is not approved.

Full details are available at: <u>https://www.liverpool.ac.uk/student-administration/research-students/progression/</u>

The objective of this annual review is to support students, identifying and removing barriers to successful degree completion. It involves an annual meeting between each student and two independent academic Assessors. A copy of all reports from students and Assessors should be emailed to the Institute PGR Student Experience Administrator.

Examples of Progress Reports by past students can be seen on the Postgraduate Research Student pages on this site (<u>https://www.liverpool.ac.uk/intranet/integrative-biology/postgraduate-research-students/</u>).

The style of reports should be typical of a doctoral thesis in the student's research area, so that the student can begin to develop thesis writing and organisation skills.

Progress Report 1

This is a report of 10 A4 pages (double -spaced) used as the basis of discussion with Assessors, submitted after around 9 months (full-time PhD) study. This report should be agreed by the student with her/his supervisor before emailing to the two Assessors. Students should allow time for feedback on a draft from the supervisor, so should start preparing the report in good time to keep to the 9 month deadline.

Progress Report 1 should provide:

- a simple literature review
- basic outline to the project
- indicate the methods used in sufficient detail to understand any results

- any results obtained and analyses completed
- progress made
- plans for research and training to be undertaken in the subsequent year

Qualifying Examination is required for the doctoral program at Chulalongkorn. This examination aims to test a student's basic knowledge, analytical skills and potential to conduct an independent study. The students have to register for Qualifying Examination in the semester they wish to take the exam. Full-time student normally be able to attain a "S" result in the **Qualifying Examination within the first 2 semesters they enroll in.** A student who receives a "U" result after taking the Qualifying Examination the first time is entitled to submit an application for re-examination one more time.

Progress Report 2

This is a report (20 pages, double-spaced) that is somewhat longer and more detailed than the first report and is used as the basis of discussion with Assessors after around 21 months of study. The contents should be similar to Progress Report 1 but:

- make use of feedback from Assessors on Progress Report 1
- more results and analyses
- plans for research and training to be undertaken in the subsequent year.

Thesis proposal examination is aimed at testing a student's knowledge both at the basic and in-depth levels. Also, problem-solving skills and the understanding of the research topics, methodologies and techniques required for his/her research is essential for conducting independent research. Students normally gain approval of their thesis proposals within <u>2</u> academic years. Failure to gain approval of their thesis proposals within <u>3</u> academic years starting from the first semester they enroll in the program shall result the termination of the student's status as graduate student at Chulalongkorn.

Thesis Plan and Revised Thesis Plan

In the later years of study, a detailed report is not required since students should be starting to draft their thesis. Students will therefore provide their Assessors with a Thesis Plan or Revised Thesis Plan as the basis of an annual discussion about the progress of their research project and thesis writing.

Students planning to submit their thesis significantly before their final deadline date should inform their Assessors of the appropriate meeting schedule for their circumstances.

A format for these plans is provided below. The thesis plan should:

- outline each proposed chapter. A title and a few sentences is sufficient.
 - indicate progress towards completion of each chapter
 - \circ experimentation and/or data collection; \circ data analysis;
 - drafting chapter;
 - feedback from supervisor;
 - completion of chapter

The meeting about the Revised Thesis Plan should be at least 6 months before the proposed thesis submission date to allow time for action on advice from Assessors. Students proposing to submit their

thesis significantly before their final submission deadline should tell their Assessors of proposed meeting dates in good time. Otherwise, meetings to discuss the Thesis Plan will be held at 33 months and a Revised Thesis Plan by 42 months post-registration

Thesis preparation is one requirement for graduation for the Double PhD degree. In preparing the thesis, students must avoid copying a piece of writing from someone else. Plagiarism is considered to be a breach of academic integrity which causes damage to the reputation of the University, affects the quality and academic ethics, and leads to a disciplinary action: more information is provided in http://www.grad.chula.ac.th/download/files/Plagiarism.pdf. See also the University of Liverpool's policy on Academic Integrity (https://www.liverpool.ac.uk/eddev/supporting-students/academic-integrity/)

Thesis Plan and Revised Thesis Plan Format

Chapter Title	Outline	Experiments/	Timetable for	Is chapter completed	Timetable
	content	data analysis	experiments/data	& reviewed by	for writing
		completed?	analysis completion	supervisor(s)?	completion
Chapter 1:					
Title					
Chapter 2:					
Title					
etc					

Here is an example of how to present this plan.

Meetings between student and Assessors

The student must organise a meeting with the Assessors and provide the appropriate documents (Three Month Report, Progress Report 1, Progress Report 2, Thesis Plan or Revised Thesis Plan) to the Assessors in good time prior to the meetings, which may take place by Skype. The supervisor will be asked to provide a statement on progress that may be from a recent University Annual Progress Form. If requested, students should bring additional materials to the meetings with Assessors – examples include lab books, training information, record of Supervisory Meetings, PGR Portfolio of Activity from the PGR Toolbox.

Discussion at the meeting can be wide-ranging although centred on the report, research plan or thesis plan and provides training for the PhD viva.

The Assessors will submit to the Institute PGR Student Experience Administrator their report on the student's report, work or thesis plan and *viva*. As well as the scientific research, the Assessors will comment on the presentation of student reports and plans in the context of what will be required for a successful PhD thesis. This will include a recommendation on whether degree registration should be continued or whether further information is required before reaching this decision. Times for any supplementary actions, reports or meetings must be agreed.

A copy of the Assessor's report will be made available to the student and supervisors. It is on the basis of this report that the IDPR ratifies any recommendation made by the supervisor in the annual on-line University Progress Report with regard to registration status.

Typical timetables for Assessment

The typical timetable for Institute assessment of postgraduate students is shown below in Table 3.

Students should ensure that they plan sufficiently far ahead to prepare documents and dates of meetings with Assessors to meet this schedule.

Year	Month of meeting with	Document
	Assessors	
1	3 (report sent to	3 month report
	Assessors – no meeting)	
1	9	Progress Report 1 (10 pages)/ Qualifying Examination
2	21	Progress Report 2 (20 pages)/Thesis Proposal
3	33	Thesis plan – chapter headings and outline content.
		Timetable to thesis submission.
4	42	Revised thesis plan & timetable to submission over next 6
		months
4	48	Latest date for thesis submission

Table 3. Assessment Calendar

Seminars by PhD students

It is expected that research students present a seminar about their research plans during the first year of registration and a second seminar when their research project is nearing completion. These seminars are given to an audience of an appropriate Research Theme, Research Group or Department. Students will be notified of arrangements.

9. How do I prepare for my time at Liverpool?

At what point in my training will I visit Liverpool and for how long?

The timing of your visit to Liverpool will be determined by your supervisors and the project plan. For some projects, it is beneficial to visit Liverpool early in the project, particularly if this is to learn new techniques that form the basis for your research. For other projects, it may be beneficial to visit Liverpool at a later stage (e.g. in year 3) to do some specialist analyses on samples that you may have collected whilst at Chulalongkorn. The minimum time that you should spend at Liverpool is six months, but, of course, this could be longer depending upon your personal circumstances. The duration and timing of your visit must be agreed by your supervisors and the Programme Management Team

How do I obtain a visa?

Non-Thai students can obtain information regarding visa application at the Office of International Affairs and Global Network, Chulalongkorn University (<u>http://www.inter.chula.ac.th/en/</u>)

Thai students can obtain information regarding UK visa at http://www.vfsglobal.co.uk/thailand/how_to_apply.htm

Before you can apply for the UK visa, you need to complete the registration progress at the University of Liverpool and obtain a student ID number. Documents you need to prepare before the visa application can be found at http://www.vfsglobal.co.uk/thailand/. Please remember to read the visa application process at least 3-4 months before your departure because it will take a while to prepare the documents. If your plan to stay in the UK is longer than 6 months, you need to get tuberculosis testing at the International Organization for Migration (IOM) http://thailand/. Please remember to read the visa application than six months must obtain medical certificate indicating that they do not have active tuberculosis before submitting the visa application. The certificate will expire in six months after the date of issue. Please register online and make an appointment for testing. Please note that if your chest x-ray is abnormal, you may need further investigation and will not receive the certificate on that day.

Once your document is ready for submission, you should visit <u>http://www.vfsglobal.co.uk/thailand/</u> again to register and make an appointment online. If your length of stay in Liverpool is less than 180 days, please apply for a short term study visa. It is similar to the Tier 4 (General) student visa but Tier 4 visa is for students who stay for longer than six months. The cost for visa is about 15,000-20,000 THB.

What accommodation is available at Chulalongkorn and Liverpool?

Students can obtain information regarding campus life at the Office of International Affairs and Global Network, Chulalongkorn University (<u>http://www.inter.chula.ac.th/en/</u>) The approximate cost of living can be accessed at <u>http://www.chula.ac.th/en/prospective-student/accommodation.</u>

The University of Liverpool has a variety of different types of accommodation (see <u>https://www.liverpool.ac.uk/accommodation/</u>) but availability depends on the time of year and your length of stay at Liverpool. If you want to make enquiries about the availability of University of Liverpool accommodation during your time at Liverpool, please contact Professor S.W. Edwards (<u>S.W.Edwards@liv.ac.uk</u>). There is also an accommodation service for accommodation in the private sector via Liverpool Student Homes:

(<u>https://www.liverpool.ac.uk/accommodation/liverpoolstudenthomes/</u>). Alternatively, UNITE is a private company that has accommodation for students at several locations across the City, but very near to the main campus (<u>http://www.unitestudents.com/liverpool</u>). Again, availability will depend on your length of stay and the time of the year.

There are several private student flats nearby the campus. These are some of the examples. Please visit the appropriate website and check for availability. A shared flat (shared bathroom and/or kitchen) costs ~£100-120 per week. A studio room (with bathroom, kitchen, refrigerator) costs ~£140-150 per week. This price covers the electricity and the internet. Most of the student accommodations offer a long term contract (43 or 51 weeks) but some of them also offer short term contract depending on the availability.

St Andrews place Address: 5E Rodney Street Liverpool L1 9ED Website: <u>http://standrewsplaceliverpool.co.uk/</u> Distance: 0.7 mile from Ronald Ross building, IGH, UoL 0.7 mile from the city center Price: 110-115 GBP per week Apollo-court Address: 6 Greek St, Liverpool L3 5QJ Website: http://www.derwentstudents.com/our-locations/liverpool/apollo-court/ Distance: 0.7 mile from Ronald Ross building, IGH, UoL 0.7 mile from the city center Price: 116 GBP per week for a room with shared kitchen, 144 GBP for a studio room

Plato house

Address: 2-4 Greek St. Liverpool L3 5QJ Website: <u>http://www.urbanstudentlife.com/accommodation/liverpool/plato-house</u> Distance: 0.7 mile from Ronald Ross building, IGH, UoL 0.7 mile from the city center Price: 140-150 GBP per week for a studio room

There are several Chinese restaurants and supermarkets/ department stores close by. Many Asian supermarkets will sell a variety of ingredients from different countries across Asia. TJ Hughes is a department store that sells most things that you will need at cheap prices. Primark (in the city centre) offers clothes and bedding etc at very reasonable prices. Lidl, Home Bargains and Poundworld are very good discount grocery stores.

What possible sources of funding are available for my expenses at Liverpool?

There are many scholarships available for international students both at the university level (<u>http://www.grad.chula.ac.th/eng/scholarships</u>) and program level, Faculty of Medicine, Chulalongkorn University (http://grad.md.chula.ac.th)

Will I be charged tuition fees or bench fees at Liverpool?

You will not be charged tuition fees whilst at Liverpool, but you will continue to pay fees to Chulalongkorn. Your time at Liverpool is part of an official Student Exchange programme, and you will probably meet with Liverpool students whilst they are undertaking research in the Faculties of Medicine or Science. Most of these students are at Chulalongkorn for 6 weeks from July of each year, but some spend much longer than that. Whilst at Liverpool, your Faculty/institute will provide research support fees.

10. How do I prepare and submit my thesis?

When you are close to submission of your thesis, you must notify the Programme Management Team and complete some forms. Also, see <u>https://www.liverpool.ac.uk/student-administration/research-students/submission-and-examination/</u> for advice. For Liverpool, no less than two months before you intend to submit your thesis you must complete Section A of the <u>Intention to Submit Form</u> and pass it to your supervisor (Appendix 2). As you will see in this form, the External Examiner will need to be identified by this time. When you have completed your thesis (after input from your supervisors on draft forms) you must submit two hard copies (in temporary binding) to the PGR Student Administration Team in the Student Administration Centre, Liverpool. Your Liverpool supervisor can help you with this submission.

When you prepare to write your thesis, you should make clear and unambiguous arrangements with your supervisors for reading, editing and approval of draft chapters. The following points describe what would reasonably be expected from you and your supervisors.

- Normally, supervisors will comment and suggest modifications to an overall thesis plan produced by the student. This should be done at an early stage. Both supervisor(s) and student should be clear as to the agreed structure and content of the proposed thesis. To assist with this process of thesis planning, you must submit a Thesis Plan as one of your final progress reports as part of Annual Review.
- Once the Thesis plan is agreed, you should start to draft your thesis Chapters. You should expect the supervisors to read and comment on draft chapters of the thesis on an agreed timescale. You should plan the preparation of your thesis to **allow time** for your supervisors to read your drafts carefully.
- You can expect supervisors to supply detailed comment and suggestions for modifications but you should not expect supervisors to provide extensive, re-written sections of your drafts or to proof-read your English.
- You are expected to take ownership of your thesis; it is your work and you will be examined on the presentation and interpretation of it.
- Because the University regulations stipulate that the thesis has a fixed submission time from the registration date, you must ensure that there is adequate time to interact with your supervisors during the preparation of the thesis. Some general guidelines on the preparation of a thesis are given in https://www.liverpool.ac.uk/student-administration/research-students/thesis-preparation/
- Your supervisors should ensure that you understand the procedures for the submission and examination of the thesis and should assist you in preparing for the oral examination (*viva voce* examination). If you are in any doubt about the current regulations that apply to you or the submission of your thesis, consult the Research Student website (<u>https://www.liverpool.ac.uk/student-administration/research-students/</u>) that provides links to all current information. The decision to submit rests with you, and while you should take due account of your supervisor's opinion, it must be stressed that at this stage it is advisory only.
- The supervisors should initiate procedures for the appointment of examiners well in advance of the thesis being submitted.

You must submit 2 softbound copies of your thesis at the Foundation Building accompanied by the 'Submission of softbound thesis' form and also email a pdf of the thesis to <u>pgrs@liv.ac.uk.</u> You should also make a softbound copy of the thesis for yourself to consult during the *viva* examination.

At Liverpool, theses can be softbound at Blackwells and the Harold Cohen or Sydney Jones Libraries at Liverpool, but do not leave this to the last moment as there may be queues or delays. Costs are approx. £5 per thesis.

What forms must I submit?

There are several forms that you must complete and submit to the University of Liverpool as part of this process. Mast of these are available at <u>https://www.liverpool.ac.uk/student-administration/research-students/a-z-forms-procedures/.</u> These are:

- Intention to submit form (completed and submitted at least two months before submission of the softbound thesis)
- Submission of a Softbound thesis form
- Certificate of completion of laboratory work and Data storage (available from the PGR administrator of your research Institute at Liverpool, see "Contacts" on page 5)

Students have to submit their final drafted theses through CU e-Thesis via the following link: https://ethesis.grad.chula.ac.th/. They should liaise their principal supervisor to be able to arrange the thesis examination date. The Program Management team will issue the invitation letter to the examination committee.

11. How will the viva or thesis defence be organised?

Where will the thesis take place?

You will have a single viva or defence of your thesis, that will be at either Liverpool or Chulalongkorn, depending on your location at the time. The panel will comprise the Chair (who will be the internal examiner of the institution hosting the viva/thesis defence), an internal examiner from the other institution and an external examiner who will be appointed by both Universities. Your supervisors may attend the viva as observers, but they will not be allowed to ask you questions. One or more of your examiners may participate by teleconferencing. Your viva/thesis defence will commence with you giving a presentation of your thesis (30-40 min), followed by detailed questioning from the examiners. You will be told of the outcome on the day and the outcomes are described below.

When will the viva take place?

For University policies see: <u>https://www.liverpool.ac.uk/aqsd/academic-codes-of-practice/pgr-code-of-practice/</u>

The University requires **the** *viva* **examination to be held within 3 months of thesis submission**. It is organised by the Internal Examiner(s). Students should communicate with the Internal about the *viva* date and arrangements. The date is usually dependent on the diary of the External Examiner, and students should make sure that they are available. They should inform the Programme Management Team if any problems arise that affect the timing of the viva (e.g. illness).

What are the possible outcomes of the viva?

At the end of the viva or thesis defence, after a short private discussion of the examiners, the students who submit their initial soft bound thesis on or after 2nd September 2019 will be informally told the outcome, which will be one of the following:

- 1. Pass
- 2. Pass subject to minor modifications (to be made usually within three months of the oral examination but can be submitted earlier than the stated deadline)
- 3. Pass subject to major modifications (revisions to be made within six months of the date of the oral examination)
- 4. Resubmission (corresponding revision to be made in order to have a follow up viva examination)
- 5. To award MPhil (University of Liverpool only) subject to, if required, amendments to the thesis
- 6. Resubmission for the award of MPhil (University of Liverpool only). The revisions to be made usually within one year of the date of the oral examination but can be submitted earlier than the stated deadline)
- 7. Fail

The examiners will also provide you with verbal feedback and you will receive a formal letter of the outcome. If modifications to the thesis are required, you will receive a list of requirements from the examiners within 7 days of the viva.

Submission of revised thesis

There are no minimum submission periods in place in respect of 'pass with minor modifications', 'pass with major modifications' or 'resubmission' *viva* outcomes.

'Pass with major modifications' is not available to the examiners in resubmission exams.

As with minor modifications, eligible candidates who pass with major modifications are not required to re-register for their studies and are not liable for further tuition or re-examination fees. The arrangements in place for resubmission remain unchanged (candidates will re-register for their studies and pay the corresponding fee).

Eligible candidates who pass with major modifications are expected to continue to meet regularly with their supervisors whilst they prepare their thesis revisions. However, they are not expected to participate in Independent Progress Assessment Panels. This is consistent with the existing arrangements in place for candidates who pass with minor modification.

The revised thesis will be submitted to the designated examiner, as outlined in the *viva* examination outcome confirmation letter issued by the University's Postgraduate Research Student Administration Team.

The revised thesis will be reviewed by each of the examiners who were involved with the initial *viva* examination to determine whether the modifications have been completed to the satisfaction of all the examiners.

What happens after the viva?

If the outcome was 2, or when corrections/amendments have been completed to the satisfaction of the examiners, you must submit a final version of your thesis. The examiners will then confirm that the amendments have been made satisfactorily, and will recommend that you be awarded the degree. Two copies, in permanent binding must be submitted to the University of Liverpool, and at least one copy of

thecompletethesistoGraduateSchool,ChulalongkornUniversity.Seehttps://www.liverpool.ac.uk/student-administration/research-students/submission-and-examination/final-submission/for details, particularly if you wish to delay open access of your thesis, forexample if IP is pending or if you do not want to disclose information ahead of publication.

According to Chulalongkorn University Graduate Studies Regulations in force, evidence of one peerreviewed international scientific publication is required for graduation (Published documents or Letter of acceptance from academic journal).

Students also have to submit the final thesis file to the e-thesis system in order to be verified for plagiarism checking. The primary supervisor needs to sign and date to approve the score.

Students need to get all relevant signatures of thesis examination committee and put them on their complete theses.

Where will the Graduation ceremony take place?

You will receive a single certificate that contains the crests of both Universities together with the signatures of officials of both institutions. You will be eligible to attend one graduation ceremony, at either institution to receive your award. The University of Liverpool holds graduation ceremonies in December and July (see <u>www.liverpool.ac.uk/graduation/</u>). All formalities must be completed before a specific deadline date (mid-November and June) in order to graduate at these times and receive the degree certificate in person. Certificates may be sent to those graduating *in absentia*. The University can provide an official letter about degree status on request to those who have completed all formalities and await the next graduation date (see <u>www.liv.ac.uk/student-administration/research/faq/</u>). At

Chulalongkorn University, graduation ceremonies take place in September. You must inform the Programme Management team of where and when you would like to receive your award.

What do I do if I have a complaint?

Complaints and Appeals

If you experience difficulties with your research (including difficulties over supervision) you should discuss them with your supervisor/advisor as early as possible. If you are unable to resolve the problem with your supervisor you should seek an informal discussion with the Programme Management Team. Please remember that the earlier that you raise an issue with the Team, the easier it is to resolve.

Formal Complaints

If you are unable to resolve your issue through the process outlined above, you will be required to progress your complaint through the University of Liverpool or Chulalongkorn University formal complaint procedures. You can find this policy at https://www.liverpool.ac.uk/student-administration/student-administration-centre/policies-procedures/complaints/

The Division of Quality Management, Faculty of Medicine, Chulalongkorn University has provides incident report forms for student complaints.

Appeals

Students have the right to appeal against decisions to downgrade their registration from PhD to MPhil, terminate studies due to unsatisfactory progress, or to deem withdrawn (termination of studies) on the grounds that they have failed to engage adequately with University procedures. Students should refer to the Guide on the Academic Progress of Postgraduate Research Students. http://www.liv.ac.uk/media/livacuk/student-

administration/research/documents/pgrcodeofpractice/Guide,on,the,Academic,Progress,of,PGR,Students,revised,December,2013.pdf

Students also have the right to appeal against the decision of the examiners following their oral examination.

Please refer to the University of Liverpool's Regulations for Research Degree Appeals http://www.liv.ac.uk/media/livacuk/tqsd/code-of-practice-on-assessment/appendix_G_cop_assess.pdf for more information

The University's Student Services offers a wide range of support, advice and guidance (see later and https://www.liverpool.ac.uk/studentsupport/)

12. Is it possible to change my registration?

Is it possible to suspend my studies if I experience difficulties?

In some circumstances, an academic suspension of study may be appropriate but this is subject to the approval of your Principal Supervisor and Programme Management Team. An academic suspension allows you to take time away from your research without losing overall time to complete your programme. During the period of academic suspension you do not accrue tuition fees. If you academically suspend your studies, you are not entitled to receive supervision or access university resources or facilities, but you will still have access to your University email accounts. Suspensions should be applied for in whole months up to a maximum of one year. Please note that backdated suspensions are not permitted – you must make an application in advance of the suspension start date. Common reasons for suspending study include:

- Ill health
- Maternity/ paternity leave
- Personal issues
- Financial issues (N.B. this is different to Financial Suspension see below)

It is sometimes more appropriate for your School/Institute/Department to grant a period of approved leave. You should speak to your supervisor and then consult with the Programme Management Team if you need to apply for a period of approved leave.

Academic suspensions should be applied for through the Suspensions and Extensions portlet in the Liverpool Life portal. Approval will be sought from your Principal Supervisor, Programme Management team and Graduate Studies team. You will be notified in writing of the outcome of your request.

How do I return from a period of academic suspension?

The Programme management Team will contact you no later than one month in advance of your expected resumption date with a request for you to confirm your intention to resume your studies. Your Principal Supervisor must email the PGR Student Team to confirm you have resumed your studies before your registration will be amended. If your Annual Progress Report has not been submitted at the time of your return from suspension you will need to complete it before your registration can be formally amended to return you from suspension.

You will also need to settle any outstanding debts that you may have before you will be permitted to resume. Unless you are granted a further period of suspension, you will start to accrue fees from the date you are due back from your suspension, regardless of the date you physically return to your programme. If you fail to resume your studies following a period of suspension, you may be deemed to have withdrawn from your studies.

Can I apply for an extension to my studies?

An extension gives you extra time at the end of your research degree, by extending your end date. Extension of study will be considered where there are serious mitigating circumstances. Extensions can be applied for through the Suspensions and Extensions portlet in the Liverpool Life portal. Approval will be sought from your Principal Supervisor and Programme Management team. You will be notified in writing of the outcome of your request by the PGR Student Team.

If students are at Liverpool and undertake a suspension of extension, they must contact the International Support Team (Liverpool) for advice before requesting a suspension as this may affect their visa conditions.

For Chulalongkorn University, PhD candidates who have successfully defended his/her thesis or dissertation examination and submitted a copy of his/her thesis within an appropriate period of time, but are still waiting for his/her research to be published in an international journal for graduation, the student may request an extension of the study period, which shall be the maximum of 2 semesters. Each granted extension shall not exceed 1 semester. To request an extension of the study period, students are required to provide evidence for the submissions of their research manuscript for publication and maintain their status as a Graduate student during the semester in which he/she has been granted an extension.

Can I transfer to another degree if do not want to continue on a PhD?

Where your registration is transferred from PhD to MPhil, either as a result of decisions made under Annual Progress Procedures or following approval of a request, the maximum period permitted for submission of the thesis for the MPhil degree will be three calendar years from the date of your initial registration for full-time studies and six years for part-time studies, in accordance with the provisions of the Ordinance governing MPhil programmes. It may also be possible, under certain circumstance, to transfer to a single award PhD at either institution. However, these are exceptional circumstances and there may be financial consequences.

Change in area of study (Chulalongkorn University)

A student may request a change in the area of study offered by the University according to criteria below. The change must be approved by the Program Management Team, the Faculty Board of the Faculty to which he/she was originally affiliated and that of the faculty to which he/she is to be affiliated.

1. A student has been enrolled as a student of the University no less than 1 semester but no longer than 1 academic year;

2. A student has achieved a GPA of no less than 3.00

Can I withdraw from the programme?

Occasionally, circumstances are such that you may wish to withdraw from your programme. Before you take this decision you are **strongly advised** to discuss withdrawing with your supervisor(s) and Programme Management Team. There are also a number of support services that can provide advice and support. More information about these can be found elsewhere in this document. To formally withdraw from the University you must complete a Withdrawal Form (http://www.liv.ac.uk/student-administration/research/a-z-forms/) and ask your supervisor to sign it. Your Programme Management Team should then forward the form to the Research and Graduate Studies Office for the withdrawal to be processed. If you fail to notify the University of your withdrawal, you will continue to accrue fees.

What if my progress is unsatisfactory?

If your School/Institute/Department deems your progress to be unsatisfactory your studies may be terminated, leading to you being withdrawn from your degree programme. For this reason, it is very important that you:

- Complete your APR on time
- Engage with your programme
- Submit your thesis and revisions on time

Failure to meet any of these responsibilities may result in you being deemed to have withdrawn from your programme of study. More information on withdrawal can be found at www.liv.ac.uk/student-administration/research/your-student-record/withdrawing/.

Please note that withdrawal, voluntary or otherwise, will not waive any debt that you may have to the University.

13. Other information

University of Liverpool policies

The following policies apply to PGR students undertaking their degree and can be found on UoL's Research Degree Administration web pages: http://www.liv.ac.uk/student-administration/research/pgr-code-of-practice/a-z-policies/

- Code of Practice on the Selection and Admission of Postgraduate Research Students
- Code of Practice on Research Student Supervision
- Code of Practice for Off-Site Registration
- Thesis Preparation
- Guidelines for Submission of a Thesis by Published Papers
- Guide on the Academic Progress of Postgraduate Research Students
- Policy on Students Undertaking Teaching Duties
- Policy in Respect of Long-term Suspensions of Studies on Medical Grounds
- Policy on Plagiarism and Fabrication of Data in Research Degree Programmes
- Regulations for Research Degree Appeals

The University of Liverpool operates a Student Charter, which has been jointly created by the University of Liverpool and the Liverpool Guild of Students to encourage the commitment of all staff and students to the principal of partnership, and to make clearer the basis on which that partnership rests. The Student Charter can be accessed at http://www.liv.ac.uk/tqsd/student-engagement/student-charter/. The formal Ordinances and Regulations for the degrees of Doctor in Philosophy (PhD) can be accessed via http://www.liv.ac.uk/student-administration/research/pgr-code-of-practice/a-z-policies/.

Useful links for graduate students

Chulalongkorn University Graduate Studies Regulations (http://www.grad.chula.ac.th/Regulations2008.pdf)

Chulalongkorn University and University of Liverpool launch Joint PhD program (http://www.chula.ac.th/en/archive/3728)

Graduate school, Chulalongkorn University (http://www.grad.chula.ac.th/eng/admission-and-study)

Graduate Affairs, Faculty of Medicine, Chulalongkorn University (http://grad.md.chula.ac.th)

Office of International Affairs and Global Network (http://www.inter.chula.ac.th/en/)

14. The Liverpool Doctoral College

Website: https://www.liverpool.ac.uk/doctoral-college/

Welcome to The Liverpool Doctoral College (LDC), the home for all doctoral training and development across the University.

Our aim is to help you, as postgraduate researchers across the University, thrive in your doctoral programme and progress to the post -doctoral career of your choice. We will support you in this with the full resources of our dedicated team of expert supervisors, professional services staff and student peers.

We are a world-leading research institution. Our researchers work at the highest international levels and the impact of their work is felt across the globe. As well as the value this adds to the experience of our doctoral students, LDC makes three specific commitments:

- Innovative doctoral training a choice-led approach allowing you the flexibility and freedom to tailor your development programme to meet your needs, circumstances and aspirations.
- The support of a thriving global LDC community enhancing both the student experience and the University's research culture, and supporting the development of future research leaders.
- A focus on employability and entrepreneurship delivering a tailored package of careers inspiration and skills development, to help you meet the expectations of employers, but also to help you thrive as entrepreneurs in your own right.

I am delighted to welcome you to the Liverpool Doctoral College and the University of Liverpool, and I wish you every success as you embark on your research degree.

Professor Graham Kemp

Director of the Liverpool Doctoral College and Associate Pro-Vice-Chancellor (Postgraduate Research)

There will be events for existing students as well as new arrivals. Details will be available on the LDC intranet site: www.liv.ac.uk/intranet/doctoral-college

16. The University of Liverpool Administration and Support for Postgraduate Students

The Liverpool Doctoral College Handbook and University policies

These are available from: <u>https://www.liverpool.ac.uk/student-administration/research-students/</u> Students have a responsibility to become familiar and keep up to date with changes and updates to the relevant University policies and procedures and the academic regulations governing their research degree programme. They should adhere to the content of these documents, as appropriate. Students also have a responsibility to become familiar with the various professional and specialist services for students, particularly in relation to health, counselling, finance, disability and immigration.

PGR Student Team

The Postgraduate Research Student Team, part of Student Administration and Support Division, aims to support the delivery of a stimulating research environment. The team manages and supports:

- Registering for the degree
- Changes to registration status
- Guidance on preparing the thesis for submission and examination

The website is: www.liverpool.ac.uk/student-administration/research-students/

Email pgrs@liv.ac.uk

Forms for thesis submission, change of registration status, travel insurance and other procedures

These are maintained by the PGR Student Team at: https://www.liverpool.ac.uk/student-administration/research-students/a-z-forms-procedures/

Student Services

Based in the Student Services Centre, this is the hub for all of the University's specialist support and welfare services for all students.

Their role is to offer advice, support and information on a wide range of non-academic issues including:

- Finance
- Disability
- Counselling and mental health
- Issues relating to general student welfare
- Support for International students

The experienced advisers are available throughout the year. The Student Services Centre is located at 150 Mount Pleasant (Building no 502, ref D6 on the Campus map). In early 2017 Student Welfare Advice & Guidance along with Careers & Employability will move into a building on University Square.

The University of Liverpool Library

The Harold Cohen Library is the University's science library (431 on the Campus Map). As well as the physical building there is very extensive electronic access to books and scientific journals free to students. Several interlibrary loan systems also allow subsidised or free access to individual articles from journals where the University does not have a subscription. Training is offered in the use of the library systems and facilities.

The Leahurst Campus Library is a specialist veterinary library serving the Leahurst campus on the Wirral.

The library website is: www.liverpool.ac.uk/library

Computing Services

Computing Services provides networked computer facilities to the University such as access to email, software, training and data storage. The Computing Services website is <u>http://www.liv.ac.uk/csd/</u>

Regulations and policies for the use of University computing facilities are at: <u>www.liv.ac.uk/csd/regulations/</u>

Students should be aware of the need for computer security, organisation and secure back-up of their data and writing from the beginning of their degree.

All PGR students can have a refurbished PC Teaching computer, if this meets their research needs. Discuss with your supervisor for this provision.

Note: Specialist servers and software for bioinformatics and some computationally intensive work are available via the Institute. Consult your supervisors if in doubt.

PGR Development

PGR Development works with Liverpool Doctoral College so postgraduate students can design personal development programmes to prepare to be effective researchers as well as providing the tools to build the knowledge, behaviours and attributes that employers demand. They provide workshops and training to help new postgraduate researchers manage the transition into research and plan their professional development, achieve impact with research and prepare for careers.

The website is: www.liverpool.ac.uk/pgr-development/

The Guild of Students

This is the student union organisation at University of Liverpool.

Its Mission is to:

- Fight for the things that matter
- Re-establish the Guild as the heart of campus

• Develop and support students

Its Vision is to improve, develop and enrich the lives of all students - from application to graduation.

The website is: http://www.liverpoolguild.org/

Scientific outreach

Most academic scientific research is funded by tax-payers (usually via government organisations) or charities. The remainder is funded by industry. Promoting public awareness and understanding of science, and the research undertaken in Universities, is thus an obligation and in self-interest for future funding. Postgraduate students should take opportunities to develop their skill and knowledge in these activities. The funders of some students require students to be involved in outreach.

Staff and students in the Institute undertake a wide range of activities. For example, the Institute of Integrative Biology's Public Engagement and Communications Group (chair Dr Raphael Levy, raphe@liv.ac.uk) has an overall view of outreach undertaken in the Institute. The daily *IIB News Bulletin* advertises and reports many outreach events.

Further sources of information include:

- Blog about outreach from IIB and the School of Life Sciences: <u>https://blogandlog.wordpress.com</u>
- Twitter from IIB: @livunillB
- Twitter about IIB outreach: <u>@livunilIBpec</u>

(Note that the University has a policy about the use of social media: <u>www.liv.ac.uk/csd/regulations/</u>)

APPENDIX 1 EXAMPLE OF AN ANNUAL PGR PROGRESS REPORT

The Universi	ty of Liverpool Information	Portal		Home	Help	Logout
View Report	cy of Elverpool Information	i i ortai	Logged In As	Steven Ed	dwards	(SBIR12)
Home Teaching Vie	ew Report					
201718 PG Progres	s Report for					
STUDENT DETAILS						
Session:	2017-18					
Title:	Mr					
Name:						
Id:						
Faculty:	Fac of Health & Life Sciences	ii.				
Department:	Inst Ageing & Chronic Diseas	se				
Major:	Musculoskeletal Biol(Medicin	e) (MKPR)				
Programme:	Doctor in Philosophy (PHD/H	L/F)				
Year of Study:	3					
Campus:	Chulalongkorn - Thailand					
Tier 4:	No					
Commence Date:	01-04-2016					
Expected End Date:	31-03-2020					
Earliest Submission Date:	31-03-2018					
Last Report Date:	02-06-2017					
Attendance:	Full-Time					
Permanent Address:		,				
Term Time Address:	Rama 4 Road, Lumpini, Path BANGKOK Thailand	omwa				
Phone Number:						
e-Mail:						
Primary Supervisor:	Robert Moots (80%)					
Other Supervisor(s):	Steven Edwards (10%) Helen Wright (10%)					

Student

IMPORTANT - Please read the following:

You are reminded that you are still bound by the declaration you signed at first registration.

There are many avenues available to discuss issues or problems you may have regarding supervision or registration in accordance with University procedure. You are encouraged to discuss such matters with your Supervisor or, if necessary, your Academic Advisor or Director of Postgraduate Research.

The Guild of Students can also offer advice on academic and personal matters, and there are several support services within the University who can provide support if you face any difficulties. Please refer to the LDC Handbook for further information on these.

However if any such matters do exist and they have not been satisfactorily resolved, please contact the PGR Student Administration Team directly.

Sponsored students:

If you are a sponsored student and the letter guaranteeing sponsorship is for a limited period, ending before the start of the next academic session, you must present a further sponsorship letter confirming continuing financial support to the Student Fees and Funding Office before the start of the next academic session. Failure to do so will result in you being automatically considered a self-financing student.

PROJECT TITLE

Please enter the working title of your thesis or research project.

The role of neutrophils derived micro-vesicles in osteoarthritis and rheumatic arthritis

RECORD OF SUPERVISORY MEETINGS

The PGR Code of Practice states that full-time postgraduate researchers are required to meet with their Supervisor a minimum of once a month. Part-time postgraduate researchers should meet with their Supervisor every other month.

If the number of meetings below **does not** comply with this requirement please enter any additional meetings in the text box below. If you do not demonstrate that you have met this requirement this will delay your re-registration.

Your Record of Supervisory Meetings for this academic session shows that up to 31/05/18, meetings with your supervisor took place on the dates listed below.

Please note that this list only displays meetings for which targets have been agreed and signed off by your supervisor.

28/06/2017 - Signed off 18/07/2017 - Signed off 23/08/2017 - Signed off 26/09/2017 - Signed off 24/10/2017 - Signed off 04/12/2017 - Signed off 24/01/2018 - Signed off 14/02/2018 - Signed off 04/04/2018 - Signed off 16/05/2018 - Signed off

Please use the box below to note any other meetings with your supervisor that took place on or before 31/05/18 and which do not appear in this list. You can also add any informal meetings that were not recorded in the PGR Toolbox. Please also mention any further meetings that took place via phone or Skype etc. In the absence of meetings, please indicate if there has been email communication with your supervisors.

I confirm that the list of supervisory meetings is a true and accurate record of the meetings held over the last APR cycle.

Yes

I confirm that I have had the minimum number of recommended meetings with my Supervisor over the last APR cycle.

Yes

SUMMARY OF PROGRESS

Please give a summary of the progress that you have made since your last report, if any. In this section you should give a brief description of the work you have completed so far, e.g. literature search completed, equipment built, experimental work still continuing etc. You should refer to the summary outcomes of your supervisory meetings and reflect on your agreed project plan and milestones for the academic session. (Minimum 300 words, maximum 750 words)

RECORD OF PROFESSIONAL DEVELOPMENT AND TRAINING

The following data has been extracted from the PGR Portfolio of Activity. Below each domain is a free text box where you can enter any further data that was not entered into the Portfolio of Activity.

Portfolio of Activity Domain A

Seminars and Conference attendance, Library and IT training and all subject specific training including research methods and experimental techniques.

Please use the box below to add activities for Domain A that are not included in the Portfolio of Activity.

Portfolio of Activity Domain B

Attendance at careers events and workshops covering Employability and Entrepreneurship and including attendance at any other Professional development workshops.

Please use the box below to add activities for Domain B that are not included in the Portfolio of Activity.

Portfolio of Activity Domain C

Training and completion of activities relating to Health and Safety, ethics, grant writing and similar activities, including Project Management.

Please use the box below to add activities for Domain C that are not included in the Portfolio of Activity.

Portfolio of Activity Domain D

Details of your Presentations, written publications, teaching and public engagement/Impact activities and related training in for these activities.

Please use the box below to add activities for Domain D that are not included in the Portfolio of Activity.

PERSONAL OR ACADEMIC PROBLEMS

Have there been any problems in the last year which you feel have affected your progress?

No

If appropriate, please refer to the webpage for information on Suspensions and Extensions and to the relevant Appendix of the PGR Code of Practice.

ACADEMIC INTEGRITY

I hereby confirm that I am aware that the University has strict guidelines on academic integrity (see Appendix 4 of the PGR Code of Practice – PGR Policy on Plagiarism and Dishonest Use of Data). I understand that it is my responsibility to ensure that I do not present anyone else's work as my own and that full and appropriate acknowledgement will be given where reference is made to the work of others.

Yes

THESIS SUBMISSION DEADLINE

I hereby confirm that I have noted the earliest and final dates for submission of my thesis (see above) and that I am aware that this is the absolute deadline for submission.

Yes

ANNUAL PROGRESSION REQUIREMENTS

I hereby confirm that all sections of my Annual Progression Requirements are fully completed for this academic year, including my Record of Supervisory Meetings and my PGR Portfolio of Activity. I understand that completion of the Annual Progression Requirements is a requirement of registration for the next academic year.

Yes

Supervisor

In completing this APR, Supervisors should refer to the Policy and Procedures on the Academic Progress of Postgraduate Research Students, which is Appendix 3 of the PGR Code of Practice.

Primary supervisors should consult with all members of the student's supervisory team before completing this form.

RECORD OF SUPERVISORY MEETINGS

Meetings that have been logged in the PGR Toolbox will be listed in the student's section of the PG Progress Report form.

If there are discrepancies, please return the report to the student for amendment.

The meeting requirements are as follows:

Full-time students: One meeting per month of registration (12 meetings per full year)

Part-time students: One meeting every second month (6 meetings per full year)

Please note that International Students on Tier 4 visas are required by UK Visas and Immigration to demonstrate a minimum of one meeting per month of registration. Not meeting this requirement may put your student's visa at risk

I confirm that the list of supervisory meetings is a true and accurate record of the meetings held over the last APR cycle.

Where the number of meetings falls below the requirements please note additional meetings that took place. The report can also be returned to your student for further details to be added.

SUMMARY OF PROGRESS

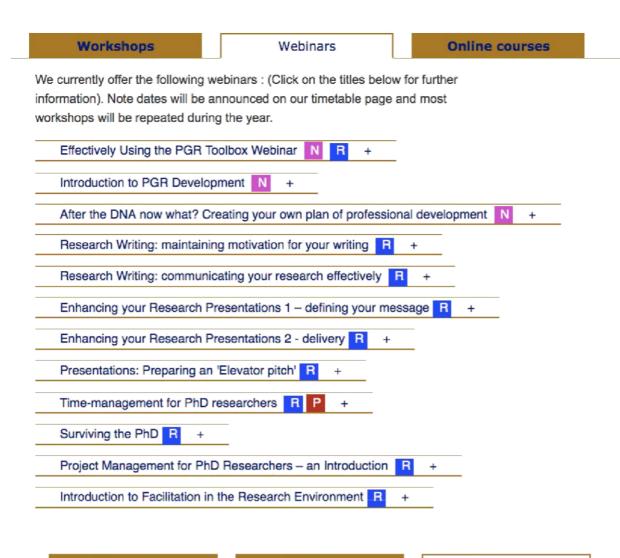
Please give a summary of the progress that the student has made since your last report, if any (250-500 words max).

Do you concur with the student's summary of their own progress?	
THESIS SUBMISSION DEADLINE	
Please confirm that you have noted the earliest and final date for submission of this student's thesis.	
ENGLISH LANGUAGE PROFICIENCY	
Has a lack of proficiency in the English language affected progress, or is it likely to affect progress in the future?	
TRAINING AND DEVELOPMENT	
I agree with the student's report on training and development for the year	
I have discussed my student's Development Needs Analysis and further plans	
Comments	
RECOMMENDATION	
I/We recommend that	
Please note that any change of registration needs to be requested using the appropriate form.	
Are there any progress issues?	
Where the recommendation is for progress procedures, including transfer to another programme, please provide additional information.	
Do all supervisors agree with this recommendation and the comments made in this report?	
I declare that I have agreed targets for the required minimum number of formal supervisory meetings.	
I understand that completion of the Annual Progress Monitoring process is a requirement for re-registering the next academic year.	for
Log When Step Who Action Notes	
02 Jul 2018 - Check Complete	

Forward to Supervisor

08:18 02 Jul 2018 - Student 15:59 Examples of available training opportunities Please see: https://www.liverpool.ac.uk/pgr-development/

Werkehene wehinere and sources	
Workshops, webinars and courses	Timetable
This page lists all PGR Development workshops, events and webinars delivered by the LDC Development Team.	Timetable for 2017-18 (As
The workshops take place on the University campus, but the webinars and	currently released)
online courses are open to all, on campus and off-site researchers.	>> Request on booking
Key to area of support:	New workshop dates and
New researchers	booking information will be
R Research Productivity	advertised in our blog, <u>PGR</u> <u>News @Liverpool</u> and in LDC
P Public Communication and Engagement	Newsletters.
C Career preparation	
Click on the links for further information.	
Workshops Webinars	Online courses
Click on the links for further information.	
Workshops delivered by the LDC Development Team	
Introduction to the Research Environment N R +	
Delivering Academic Presentations N R +	
Presentations: Delivering an Elevator Pitch P R +	
Presentations: Pecha Kucha P R +	
BiteSize Thesis Writing: thesis format and structure R +	
BiteSize Thesis Writing: read, write, repeat R +	
BiteSize Thesis Writing: editing for clarity R +	
BiteSize Thesis Writing: overcoming writer's block R +	
Preparing poster presentations R +	
Public Engagement Incubator P +	
Designing a Public Engagement Project using Design Thinking P +	
Setting Goals with Lego Serious Play R +	
Innovation Incubator: Generating Ideas R P +	
Design Thinking Studio 1: Empathy & Defining the Problem R P	+
Design Thinking Studio 2: Ideate and Rapid Prototyping R P +	_
Design Thinking Studio 3: Refining your Prototype, Iteration and Testing	R P +
Motivating Yourself and Others R C +	
Asking Good Questions as a Facilitator R C +	
Becoming a Facilitator R C +	
Facilitating Meetings R C +	
Designing & Facilitating Experiential Learning Exercises C +	



Workshops	Webinars	Online courses			
We currently offer the following online courses: (Click on the titles below for further information)					
Communicating Research in the Humanities & Social Sciences Online N R P +					
Communicating Research	in the Sciences Online N R P	+			
Career Development Portfo	blio - 6 week Online course C +				
Frequently Asked Questions					
Click on the links for answers to	each query.				
 What time will I need to spen 	d on these courses?				
 Do I need to be available at a 	any specific times?				
Please contact me directly for a Dr Shirley Cooper, email: <u>Shirl</u> e					