Clinical Degrees at the Institute of Cancer Research

The Institute of Cancer Research

The Institute of Cancer Research (ICR) is one of the world's most influential cancer research organisations, dedicated to advancing treatment and improving the lives of cancer patients. We have been carrying out world-leading research into the causes of cancer, and how it might be treated or prevented, for more than 100 years, growing from a small research laboratory in 1909 to today's pioneering research institute based across two sites in London and with strategic links to The Royal Marsden.

As well as our prestigious research history, the ICR has a long history in training the next generation of cancer researchers. In 1927, the University of London recognised the ICR as a centre for postgraduate medical teaching and training. When the ICR separated from The Royal Marsden over 20 years later, the ICR took the academic status and became part of the British Postgraduate Medical Federation. When this was dissolved in 1996 the ICR became an Associate Institution of the University of London, and was recognised as a full College of the University of London in 2003. We are now a regulated Higher Education Institution offering a number of research and taught degrees to both clinicians and non-clinicians, many of whom work in the NHS.

The ICR Vision

Here at the ICR we aim to transform cancer patients' lives through world-class research and education, while growing our societal impact.

Our Defeating Cancer strategy is based on three pillars:

- Research: World-class cancer research aimed at understanding the cancer ecosystem, overcoming drug resistance, and improving diagnosis and treatment.
- Learning and Teaching: Empowering future leaders in cancer research and treatment through high-quality education and training.
- Operations: Maximising research impact by building partnerships and engaging with industry, healthcare and the public.

Education at the ICR

The ICR is a Higher Education Institution regulated by the Office for Students and with the ability to award degrees from the University of London.

Research Degrees

We offer two different clinical research degrees, the PhD and the MD(Res), both of which are doctoral level degrees (Level 8 of the Framework for Higher Education Qualifications in England, Wales and Northern Ireland).

More information about the structure of the clinical PhD and MD(Res) programmes can be found below in the section 'Clinical Degrees at the ICR'.

We also offer around 20 fully funded non-clinical PhD studentships each year.

Taught Courses

We run the extremely successful MSc in Oncology, a part-time modular programme designed for medically qualified candidates who intend to pursue a professional career in some aspect of clinical or medical oncology, either as a clinical academic or a clinician. The course adopts a modular, credit-based model with interim exit points at Postgraduate Certificate (PGCert) and Postgraduate Diploma (PGDip) level.

The curriculum equips Clinical Oncology students to sit Parts 1 and 2 examinations for Fellowship of the Royal College of Radiologists as well as providing a theoretical basis for the structured training of Medical Oncologists.

ICR and The Royal Marsden

The Royal Marsden NHS Foundation Trust is a world-leading specialist cancer hospital and the ICR works in close partnership with The Royal Marsden to take the results of our research rapidly into the clinic, with the aim of developing better treatments for cancer patients. Our academic clinicians form a vital link in our translational research, bringing knowledge of clinical practice into the laboratory and taking the knowledge of laboratory research back into the clinic and using it to help cancer patients – this is our 'bench to bedside' principle.

With hospitals in Chelsea and Sutton, and a chemotherapy suite at Kingston Hospital, The Royal Marsden treats 50,000 patients from across the UK and abroad every year. Many of these patients benefit from tailored treatment programmes accomplished through provision of molecular diagnostics – allowing doctors to determine which specific treatments will be of most benefit to a particular patient.

The ICR and The Royal Marsden are internationally renowned for collaborative work in conducting early- and late-phase clinical trials. Our joint **Drug Development Unit**, which sees around 300 patients per year, is one of the largest centres for Phase I trials in the world and makes an important contribution to the worldwide effort to discover and develop new cancer drugs.

The ICR and The Royal Marsden together are ranked in the top four centres for cancer research and treatment worldwide. In 2006, we were selected as a <u>National Institute for Health and Care Research Biomedical Research Centre</u> specialising in cancer.

Who Can Supervise Clinical Degrees

The ICR has a system of Honorary Faculty appointments whereby the titles 'Associate Honorary Faculty' and 'Honorary Faculty' are used to denote a formal academic affiliation with the ICR, thus providing recognition for Royal Marsden staff that undertake research and teaching activities. In addition, Honorary Faculty appointments can be awarded to individuals actively involved with ICR research and/or teaching who are based at an organisation with which the ICR works in a formal strategic partnership.

Associate Honorary Faculty appointments are awarded to researchers early in their independent academic careers and also those with heavy clinical service or other commitments who nevertheless are actively involved in ICR research and/or teaching.

As well as acknowledging the role played in the research and teaching life of the ICR, the conferment of Associate Honorary Faculty or Honorary Faculty status permits staff to act as a primary supervisor of ICR research degree students (provided that all other supervisor requirements are fulfilled and that the project and supervisory team have been approved on an individual basis by the standard ICR mechanisms). It should be noted that in cases where a primary supervisor is not an ICR Recognised Supervisor then the supervisory team must include an IRS Partner (eligibility criteria for becoming an ICR Recognised Supervisor are detailed in both the MPhil/PhD and MD(Res) Codes of Practice).

As a supervisor of research degree students there are a number of benefits, both to research and career development, including the opportunity to attract high calibre research students, research portfolio enhancements through greater collaboration with clinical and scientific researchers, and access to ICR infrastructure for both research and education. There is also scope to become involved in working with Allied Health Professionals (AHPs) through the supervision of a PhD or MD(Res), and, in collaboration with the Royal Marsden, the ICR is already part of collaborative work in applied health research in supporting nurses and AHPs at various stages of their clinical academic research careers.

Features of Associate Honorary Faculty and Honorary Faculty Status

As well as being able to act as the primary supervisor of ICR research degree students Honorary and Associate Honorary Faculty status also allows individuals to:

- apply for external research grants as a Principal Investigator (subject to ICR grant application procedures)
- have a webpage on the external ICR website and access to Symplectic Elements for monitoring publications
- have access to ICR buildings, IT systems and/or an ICR email account

Eligibility Criteria

Eligibility criteria for Associate Honorary Faculty and Honorary Faculty status are listed in the table below:

	Associate Honorary Faculty	Honorary Faculty
Substantive employment	Yes, majority of contracted employment with the partner	
with an organisation the ICR	organisation.	
works with in a formal		
partnership		
Consultant status or	Ye	es
consultant/principal clinical		
scientist		
Higher degree	Yes	
Publications and other	Usual expectation is a first	Substantial scientific output
research outputs	author publication from a	that has had an impact in the
	higher degree. It is desirable	field.
	to have subsequent	

	publications or other outputs resulting from independent research.	
Research leadership experience	Evidence of leading independent research.	Strong leadership experience including scientific leadership experience. PI on trials/grants. Membership of key committees.
Research/teaching background	Evidence of commitment to active involvement in research. Involvement in ICR teaching will also be taken into account.	Established research activity. Involvement in ICR teaching will also be taken into account.
Research focus and interest	Substantial interaction with the ICR, for example part of the ICR/RM BRC. Research interests that align with at least one ICR Division.	
Support from ICR Head of Division	Yes	
Protected research time in job plan	At least one programmed activity is expected and essential if research student supervision is planned.	
Grants awarded	Not essential.	Track record in securing research grants.

For more information about Associate Honorary Faculty and Honorary Faculty status please contact researchdegress@icr.ac.uk.

Clinical Degrees at the ICR

The ICR offers both MD(Res) and MPhil/PhD research degree programmes for clinicians, both of which are doctoral degrees at the same academic level. Both require a period out of clinical specialty training, with the MD(Res) requiring the full-time equivalent of two years of study and the PhD requiring the full-time equivalent of three years. For information on the eligibility requirements that apply for enrolment on either degree programme visit the ICR webpage Opportunities for Clinicians.

For both degrees:

- Students receive expert supervision from ICR faculty and participate in the highly successful translational research culture of the ICR and The Royal Marsden.
- It is expected that students will make a substantial contribution to knowledge in their clinical area through hypothesis-driven original research, normally leading to published work
- Students are required to submit a thesis and pass a viva at the end of the programme.
- Alignment is at Level 8 (ie. doctoral level) of the Framework for Higher Education Qualifications in England, Wales and Northern Ireland.

However, the key difference is the degree structure:

• A PhD is often lab-based, with funding through clinical fellowships lasting three years.

• An MD(Res) lasts a minimum of two years and combines a student's research with clinical practice. The expectation is that the MD(Res) thesis is submitted within three years.

Course essentials

The table below summarises important information about each course to allow for easy comparison:

	MPhil/PhD (clinical)	MD(Res)
Entry Requirements	Essential:	1.12(1.00)
	 Hold an MBBS degree or an alternative registrable primary qualification in Medicine AND be eligible for full registration or hold limited registration with the General Medical Council OR Hold a BDS degree and/or be eligible for registration with the General Dental Council Clinical experience relevant to the project Desirable: Research experience relevant to the project 	
Length of course and	Fellowship funding is typically	Students are expected to register
possible exit points	for a period of 3 years. There are 2 exit points: • MPhil: successful completion of first year, including upgrade report and transfer viva • PhD: successful completion of research project, including thesis and final viva	for a minimum of 2 years. There is only 1 exit point: • MD(Res): successful completion of research project, including thesis and final oral examination
Degree-awarding institution	University of London	
Outline of course structure and assessment	Initially, students are registered for an MPhil. After the first year an upgrade report and oral examination takes place (known as a transfer viva). Successful students will then be transferred onto PhD registration. At the end of the PhD programme (3 years), students will be expected to submit	At the end of the registration period students will be expected to submit their thesis (c.50,000 words) and to complete an oral examination.
Possible locations		arch sites – in Chelsea and Sutton. ends on individual projects, this is

Thesis submission	Students must submit their	Students are expected to submit
	thesis within 4 years, with	their thesis within 3 years, with a
	exceptions to this rule only	hard deadline of 4 years applying.
	possible in very rare	Exceptions to this rule are only
	circumstances.	possible in very rare
		circumstances.

Transferring from MD(Res) to MPhil/PhD

The ICR's Academic Regulations indicate that transfer from the MD(Res) to the MPhil/PhD programme is possible subject to: i) approval by the Academic Dean or by his/her deputy, and ii) there being good academic grounds in support of the transfer, or other good cause that is found to be acceptable.

It should be noted that entry to the MPhil/PhD programme via transfer from the MD(Res) programme is not standard practice and may only be considered as an exception to standard practice at the end of the first year. The normal process for clinicians to enter the MPhil/PhD programme is via competitive application.

Choosing a Degree

- Course structure: One of the key differences between the two degrees is the structure of the course and the time requirements. While a PhD is generally lab-based and lasts a minimum of three years, an MD(Res) is shorter and combines research work with clinical practice.
- Career ambitions: The MD(Res) is generally more suited to those in, or aspiring to be in, clinical roles, who want to be able to use their specialist knowledge to diagnose and interact with patients. For those looking to take their careers in a more research-focused direction a PhD may be more appropriate.
- Financial requirements: One of the key factors to take into consideration is the cost of the degree. As the MD(Res) is one year shorter than the PhD then this may be a factor in determining which degree to choose.

Recruitment and Admissions

Prior to applying for a research degree programme at the ICR candidates and their supervisors should discuss the appropriateness of the project and the candidate's preference for either an MPhil/PhD or an MD(Res). Although some clinical PhD students will start in October along with the majority of our other PhD students there is no fixed start date for either the clinical PhD or MD(Res).

Supervisors need to apply to register a student with us, with approval for both the project and the student required. It is possible to package a project in a similar way to a regular job advert, and if this is the case then the Deputy Dean (Clinical Sciences) must be involved with the recruitment process from the beginning, not just at the point of selecting a suitable student.

Full funding for the duration of the research degree must be available prior to student registration (for full-time students this constitutes two years for an MD(Res) and three years for a PhD; or the equivalent pro rata for part-time students). As mentioned earlier, transfer from the MD(Res) to the

MPhil/PhD is not a standard route onto the PhD programme, and an increase in available funding after MD(Res) registration is not sufficient grounds for transfer to the PhD programme.

Information on funding options for our clinical degrees can be seen on our <u>Opportunities for Clinicians</u> webpage. It is worth noting that when resourcing a project funding for tuition fees, salary and consumables will be required, and that the majority of students will be registered as full-time (with clinics taking up no more than 10% of their working time). Study on a part-time basis, with a minimum of 50%, will only be permitted in exceptional circumstances.

Prior to registration, applicants for MD(Res) degrees are required to meet with a member of the Academic Dean's Team for a pre-registration 'chat'. At this meeting, the applicant and member of ADT will discuss the project, look at the supervisory team and discuss the programme in detail to ensure the project is appropriate for the MD(Res) programme. All paperwork should be completed by the supervisory team prior to student registration, with there being no possibly to backdate registration.

Annual admissions exercise through funded programmes

The majority of clinical PhD students will apply to the ICR's clinical training programmes during the annual admissions exercise, with details available at the ICR's <u>Applying for Clinical Training Programmes</u> webpage. The typical timeline for such applications is:

- Step 1: Initial contact with the ICR through completion and submission of a CV along with a Project Preference Form
- Step 2: Discussions with supervisors at an introductory meeting
- Step 3: Project development where the successful student and supervisor will jointly work up a full project proposal
- Step 4: Panel interview if the full project proposal is shortlisted

Applications outside of advertised funded programmes

If applying for a research degree outside of the funded programmes that are advertised on the ICR website students and supervisors should discuss whether the project is appropriate for a PhD or an MD(Res) and if there is a preference for one over the other.

Full funding for the duration of the research degree must be available – 2 years for MD(Res) and 3 years for MPhil/PhD. Students should be directed to the Registry team (admissions@icr.ac.uk) so that the admissions process and all requirements can be explained fully. An outline of the process is given below:

- Step 1: Students should approach a potential supervisor and agree on a research topic plus protocol outline
- Step 2: All necessary paperwork (application form, protocol outline form approved by the supervisor's Head of Division, supervisor form) should be completed
- Step 3: All necessary documents should be sent to the Registry team
- Step 4: Students should meet with a member of the Academic Dean's Team for a preregistration 'chat'. At this meeting the project, supervisory team, and the programme will be discussed in detail. This meeting ensures the project is right for our programme, and our programme is right for the student.

Tuition Fees and Funding Options

Tuition fees cover aspects of study such as registration, tuition, supervision and examination, and are paid each year as part of registering on a degree programme. Current tuition fees can be seen on the ICR's <u>Tuition Fees</u> webpage, with fees reviewed annually.

Self-financing PhD and MD(Res) students who are also members of staff at the ICR or the Royal Marsden receive a 50% discount on their research degree tuition fees.

Applicants for clinical PhDs are able to apply for fellowships that pay for tuition fees, research expenses, and a clinical salary. For more details on fellowships the ICR's <u>Funding Options for Clinical Research Degrees</u> webpage should be consulted.

A Brief Guide to Research Degree Supervision at the ICR

Supervisory Team

All students have a supervisory team which must include a Primary Supervisor, a Secondary Supervisor and up to two Associate Supervisors, with all supervisory teams requiring approval by the Deputy Dean (Clinical Sciences) at the point of setting up a project.

Key responsibilities of the Primary Supervisor include:

- Designing the project in collaboration with other supervisors and agreeing the final project title.
- Agreeing a plan of work with the student and monitoring it throughout the course of the degree programme. This will involve holding regular meetings between the Supervisory Team and the student.
- Ensuring the provision of training in techniques necessary to carry out the project.
- Ensuring that the student has appropriate access to the library, information, biological and other services which are needed for the project.
- Reviewing the student's training record via the training tracker on iProgress and their Personal Development Plan.
- Helping the student to prepare progress reports and prepare their thesis for submission prior to the end of the period of study. They are also responsible for ensuring the student receives training in oral presentation as may be necessary throughout the project and for the viva examination.
- Returning reports on the student's progress to the Registry, punctually, via iProgress each year of the degree programme.
- The day-to-day welfare of the student (including reporting unauthorised absence and/or lack of engagement in their studies).

The Academic Dean's Team

The Academic Dean has overall responsibility for the management of all education and training activities and ensures that all students receive appropriate supervision and have adequate resources during their time at the ICR. This responsibility is delegated to the Deputy Deans, with whom students will interact on matters of welfare and academic progress.

The Deputy Dean (Clinical Sciences) has responsibility for the welfare and academic progress of all clinical MPhil/PhD and MD(Res) students and is supported by a Senior Tutor appointed by the Academic Dean. There is also a similar structure in place for non-clinical students, where the Deputy Dean (Biomedical Sciences) is supported by a number of Senior Tutors at both Chelsea and Sutton sites. Collectively this group is referred to as the Academic Dean's Team and it has responsibility for the general welfare of all ICR students.

The Registry Team

The Registry team is part of the Education and Library Services Directorate and deals with all administrative aspects of postgraduate study at the ICR. This includes co-ordinating the student recruitment, admissions and registration processes, maintaining student records, supporting the Academic Dean's Team in monitoring student progress and key milestone activities, and arranging the ICR Awards ceremony.

Registry staff are available to advise on day-to-day queries or problems that may arise during research degree programmes. Supervisors and students are welcome to contact the Registry team at any time during office hours. The Registry staff are based on the second floor of the Sir Richard Doll Building in Sutton and can be contacted by email at researchdegrees@icr.ac.uk.

iProgress

<u>iProgress</u> is an online system for recording, monitoring and reporting on student progression and skills training activity. It supports the administrative processes around the milestones that students have to achieve during their programme of study. The system also provides an efficient way of managing information related to each student at the ICR. Both students and supervisors will need to use iProgress during the course of a student's degree programme, with the Registry team overseeing progress for all students.

Sites and Facilities

The Sir John Beckwith Library in Sutton is located in the Brookes Lawley Building (BLB). Library staff are available to help with any enquiries from Monday to Friday 9am-5pm and there is 24-hour access for registered users. The Library has an extensive online catalogue, including books and journals, which can be accessed both on and offsite. Access to journals is available from both inside and outside the ICR (via https://journals.icr.ac.uk). If the ICR doesn't have access to an article through its subscriptions a copy can be requested for free by completing the online request form.

Students at the ICR may also use the University of London Library (Senate House).

Both Sutton and Chelsea sites have study rooms available for use by research degree students, these are a physical environment that provide a pleasant and quiet area to study. Final year students are given priority in the use of these rooms. The study room at Chelsea is equipped with desks and computers, with the study room in Sutton attached to the John Beckwith library.

Training and Skills Development

Research students at the ICR are provided with two key e-learning resources to develop the knowledge and skills that are necessary to excel in cancer research. *Perspectives in Oncology* is a modular e-learning website that provides a basic grounding in several aspects of cancer science. The *Skills* website is a blog style resource giving tips and advice on transferable skills useful for research at the ICR and beyond.

Perspectives in Oncology

Perspectives in Oncology is designed to give ICR students a common grounding in many areas of cancer science. Each module has been built with the guidance of an expert scientist or clinician from the ICR or the Royal Marsden. Areas covered include cancer epidemiology, cancer genetics, cell biology and signalling, bioinformatics, medical physics, structural biology, cancer treatment, and drug development.

Skills

The *Skills* website brings together tips and advice relating to skills development written by ICR staff, students, postdocs and other experts. The website evolves alongside a student's research degree, delivering new material highlighted through email updates. Themes covered include time management, scientific writing and presentation, advice on career choices, as well as the broader implications of work at the ICR.

Personal Development Plan

The learning contract agreed between a Primary Supervisor and their student in the first three months of the degree programme, laying out the research objectives and skills development needed for their project, will form a framework for the Personal Development Plan. As a starting point students are encouraged to visit the <u>Training Needs Screener</u> within their first month at the ICR. This tool helps students to identify and prioritise immediate training needs, and selects courses and materials that may be of particular interest to help improve their weaker areas. It will populate a Personal Development Plan with these, which should be developed further in collaboration with the Primary Supervisor.

Academic Committees

We have a number of committees that are focused on our educational provision, all of which involve student representatives and some of which are run by students. All of these committees are ultimately responsible to our Academic Board, with one of its key functions being to ensure that we have a rigorous and responsive Quality Assurance (QA) framework in place with which to develop and deliver the ICR's Education Strategy.

More details about our committees can be found below in the 'ICR Terminology' section.

Key Contacts

If you need to contact us about anything then please use the following details:

- Registry Team (<u>researchdegrees@icr.ac.uk</u>) for all general queries about clinical degrees at the ICR.
- Head of Registry Dr Dave Borthwick (<u>dave.borthwick@icr.ac.uk</u>)
- Deputy Dean (Clinical Sciences) Professor Nick James (nick.james@icr.ac.uk)

ICR Terminology

 Academic Board: reports to the ICR's Board of Trustees on all academic and teaching matters, as well as questions of education policy. It ensures that the ICR has a rigorous

- and responsive Quality Assurance framework in place and is responsible for the academic standards of all research degrees and taught course programmes.
- Academic Dean: has overall responsibility for the management of all education and training activities and ensures that all students receive appropriate supervision and have adequate resources during their time at the ICR. This responsibility is delegated to the Deputy Deans, with whom students will interact on matters of welfare and academic progress.
- Academic Dean's Team (ADT): the Deputy Deans and Senior Tutors with responsibility for the academic and general welfare of all ICR students.
- **Associate Honorary Faculty:** appointments awarded to researchers early in their independent academic careers and also those with heavy clinical service or other commitments who are actively involved in ICR research and/or teaching.
- **Deputy Dean (Clinical Sciences):** has responsibility for the welfare and academic progress of all clinical MPhil/PhD and MD(Res) students.
- Honorary Faculty: appointments awarded to individuals actively involved with ICR research and/or teaching who are based at an organisation with which the ICR works in a formal strategic partnership.
- ICR Recognised Supervisor: an experienced member of Faculty or Honorary Faculty who has completed a training course in research degree student supervision at the ICR.
- **iProgress:** the online system for recording, monitoring and reporting on student progression and skills training activity. It is used by students and supervisors to record all the milestones that students have to achieve during their period of registration.
- **IRS Partner:** provides guidance and support to the Primary Supervisor as necessary during the course of a research project.
- Office for Students (OfS): the independent regulator of higher education in England.
- **Perspectives in Oncology:** an online resource designed to give an overview of the field of cancer science.
- **Postgraduate Certificate (PGCert):** a postgraduate qualification that provides training at Masters level in a specific subject area but takes less time to complete than a full MSc.
- Postgraduate Diploma (PGDip): a postgraduate qualification that provides training at
 Masters level in a specific subject area. It lies midway between a PGCert and a full
 Masters degree.
- **Primary Supervisor:** has overall responsibility for the student and the research project.

- **Registry:** the professional services team that looks after the academic and welfare needs of all research degree students at the ICR.
- Research Degrees Committee (RDC): reports to Academic Board and is responsible for ensuring that all aspects of research degrees and related training are of the appropriate quality.
- Research Degrees Student Liaison Committee (RDSLC): the primary point of contact
 for staff and research degree students to raise issues and provide information across the
 spectrum of matters affecting students in their work and wider student life. All members
 of the Student Committee are automatically members of the RDSLC, which is chaired by
 the Student President.
- **Secondary Supervisor:** a member of the supervisory team with responsibilities for reviewing milestone progress and attending the transfer viva.
- **Senior Tutor:** members of Faculty who support the Deputy Deans in monitoring student welfare and academic progress. Every research degree student is assigned a Senior Tutor for the period of their degree.
- **Supervisory Team:** the group of Primary, Secondary and, optionally, Associate Supervisors that are responsible for the student and the research project.
- Taught Courses Committee (TCC): reports to Academic Board and is responsible for ensuring that all aspects of taught course degrees and related training are of the appropriate quality.
- Transfer viva: the oral examination taking place after submission of the transfer report. This happens within 12 months of registration, with the examination panel consisting of a member of ADT (acting as Chair), a nominated independent internal assessor and the Secondary Supervisor.