

GUIDELINES FOR ICB CDT STUDENTSHIP APPLICATIONS 2015/16 | “ANNUAL” SCHEME



CDT BACKGROUND INFORMATION

The Institute of Chemical Biology (ICB) has been awarded an Engineering and Physical Sciences Research Council (EPSRC) Centre for Doctoral Training (CDT) in physical sciences innovation in Chemical Biology for bio-industry and healthcare and is inviting proposals for 4 year PhD studentships.

A minimum of 5 studentships that will be part of the ICB CDT could be awarded for an October 2015 start through the “annual” scheme (subject to the quality of proposals matching the ICB selection and quality criteria). More studentships will become available in sector specific calls (e.g. the joint ICB-Grantham institute call) later this year.

This CDT will train a new generation of PhD graduates (>90 over 5 years) in translational multidisciplinary research through a bespoke training and research program (MRes + 3 Year PhD). These students will be armed with an in-depth understanding of product development pipelines across a variety of sectors, acquired through first-hand experience of multi-disciplinary translational research and early stage commercialisation. This will enable them to become leaders of technology innovation and translation in the medical, pharma, life science, personal care and agri-science industries.

THE RESEARCH THEME

The central research theme of the ICB CDT is concerned with the development of new molecular tools and technologies to study specific molecular interactions and their applications to strategic biological and biomedical problems. These will be used to address key challenges in the pharma, medical, biotech, personal care or agri-science sectors. Project proposals concerned with either translational or basic research will be considered but in all instances there must be underpinning innovation in the physical sciences.

THE STUDENTSHIP

The studentships, starting in the 2015/16 academic year, comprise a 1-year MRes in Chemical Biology: Industrial Innovation and Translation, followed by a 3-year PhD. The MRes course involves taught elements in basic Chemical Biology, which lasts from October-January, followed by a research project that runs from January to September.

The studentship will cover tuition fees and stipend for a total of 4 years. In addition, there is a consumable allowance of £3,000 per annum and a total of £1,800 towards travel and the EVOLVE program per studentship.

SUPERVISOR ELIGIBILITY

Imperial College rules	Supervisors must fulfill the usual College criteria for eligibility to act as a PhD supervisor.
Number of supervisors and tenure	At least two supervisors on the application must hold an academic position at Imperial College that is tenured over the complete period of the studentship. This does not mean that IC supervisors who do not hold a position for the full four year period cannot apply. However, in such circumstances a third supervisor (from Imperial College) who could continue the student supervision (if the original supervisor's tenure was not extended) would have to be added.
Expertise	The supervisors should provide different skill sets, and the most usual division will be to have one “medical/biological/agri science/personal care” and one “physical/ engineering/ mathematics” supervisor. These definitions are not meant to be restrictive, nor are they necessarily defined by departmental affiliations. What is important is exposure of the student to multiple disciplines, wherever these are located. Refer also to “Multidisciplinarity” under “Project requirements” below.
External supervisors	The primary supervisor must be Imperial based. Non-Imperial supervisors may be included but at least two supervisors on the application must hold an academic position at Imperial College, as it is vital that the student has a multidisciplinary lab experience. The inclusion of external supervisors should be discussed with the CDT director/ deputy directors before submission of the application form. Please contact them early in the process.
Cap on number of applications	A maximum of 2 applications per supervisor is allowed.

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PROJECT REQUIREMENTS “ANNUAL CALL” - ASSESSED COMPONENTS		Threshold / maximum score
Science Remit (fit to theme)	Proposals will typically be concerned with the development of new molecular tools and technologies to study specific molecular interactions that address key challenges in the pharma, biotech, personal care or agriscience sectors . Project proposals concerned with either translational or basic research will be considered, but in both instances there must be underpinning innovation in the physical sciences. In particular note that in addition to the previous remit of the study of protein-protein and protein-lipid interactions, any molecular interactions of biomedical and biological importance such as (but not restricted to) protein-nucleic acid, lipid-drug, lipid-lipid, lipid-nucleic acid and lipid-metabolite interactions will also be considered.	(3.0/5.0)
Physical science innovation	The application must demonstrate innovation in the physical sciences . Technologies can be experimental or theoretical (making, measuring, manipulating and modelling). A solely biological/medical proposal, no matter how interesting, cannot be funded. Typically, projects would involve the development or the translation of a new technology applied to a biological problem. Modification of an existing technology to solve a specific biological problem is allowed as well, but there has to be considerable novelty in the development of the technology underpinned by innovation in the physical sciences. Translation into a new sector without innovation in the physical sciences is not within the remit of the CDT.	(4.0/6.0)
Multidisciplinarity	It is fundamental that the project is inherently multidisciplinary. Therefore it must include at least two supervisors. The supervisors should provide the different skill sets, and the most usual division will be to have one “medical/biological/agri science/personal care sciences” and one “physical” supervisor. These definitions are not meant to be restrictive, nor are they necessarily defined by departmental affiliations. What is important is exposure of the student to multiple disciplines, wherever these are located. It is expected that the student will typically undertake work in each research environment for some part of the study, including the MRes project.	(3.0/5.0)
Feasibility and Suitability	ICB-CDT PhD studentships are fully funded for 4 years (1+3 year format). The first year is an MRes course with taught components in the first few months and a research project subsequently starting in January and finishing in September. Even though this research project directly feeds into the 3 year PhD, the proposal must put forward a self-contained MRes project that can be achieved within 9 months. If the proposed project builds on a previously funded CDT studentship you must include details of the innovation that has been successfully achieved and list outputs (the work must be published or patented). OR If the suggested technology is completely new please explain why you think the proposed work will be successful and provide a risk mitigation plan (“plan B for the student”)	(4.0/6.0)
Synergy	In order to facilitate networking amongst the students, new projects must have synergy with existing ICB core activities. It is important to explain the communalities of the proposed project with existing ones (http://www.icb-cdt.co.uk/research/projects) e.g. in terms of tools and technology development, common biological problem/target, potential for technology translation. Please mention which supervisors you have talked to about synergies.	(2.5/4.0)

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Impact	Describe the intended impact/ scientific merit that would arise from this work. This can include a translational element (e.g. how the application of the new technology could be applied to other biological problems) and / or any other added value that the project can bring to the ICB, such as outreach, new collaborations (with companies) and follow-on funding. Indicate the timeframe for the achievements listed in your impact statement.	(2.5/4.0)
Please note the different weighting and threshold of each requirement!		Maximum Score : 30.0

APPLICATION AND REVIEW PROCESS

How to apply	<p>The awards will be made on the basis of written applications to the ICB. Applications to the ICB must be made using the separate application forms provided.</p> <p>When filling in the application form it is important to demonstrate that your proposed project meets all the criteria listed (see section “requirements” below). Proposals should clearly outline the innovative aspect of the research counterbalanced by its achievability in terms of time and funds.</p> <p>Please specify your research infrastructure, including the access to resources already in place and any additional needs in the feasibility section.</p> <p>With the award of a studentship, supervisors automatically become ICB members. Therefore, you must select at least one of the “ICB membership activities” (listed in the Annex) you would like to get involved in.</p>
Page Limit and Font	Please complete your application by entering your text only into the tables in the word document and restrict your application to the four page limit. Do not use a font less than 10 pt Arial. Note that we cannot consider applications longer than 4 pages and in any other format than .doc or .docx. Annexes and additional tables are not allowed.
Review and Award	<p>A minimum of 5 studentships will be awarded via this call (subject to the quality of proposals matching the ICB selection and quality criteria). Typically, the ICB receives 20-30 applications in this scheme. Details of other schemes will be published on our website.</p> <p>Each proposal will be independently scored by at least 7 markers drawn from members of the ICB Research Board (see Annex). In addition, applicants can suggest Imperial College academics that have the necessary expertise to review the application.</p> <p>Following the ranking according to the scores from the markers, each studentship application will be discussed in a moderation meeting prior to finalising the ranking.</p> <p>Ultimately, the ICB Research Board (a list of members can be found in the Annex) will be responsible for deciding which and how many applications should be supported.</p>
Relevant Dates	<p>- APPLICATION DEADLINE: Please email the completed application form as doc or docx file to Erika (e.rosivatz@imperial.ac.uk) by Thursday 12pm, 6th November 2014.</p> <p>- WORKSHOP for (new) applicants: Wednesday 12 pm, 15th October 2014, SALC 6, Sherfield Building L5, South Kensington Campus: ICB CDT Director, Oscar Ces, will give proposal writing tips, followed by a Q&A session.</p> <p>- BOARD MEETING 27th November 2014</p> <p>- Notification Applicants will be informed as soon as possible after the board meeting.</p> <p>- Recruitment IC PG Open day, ICB recruitment days in January</p>
Any Questions?	We actively encourage participants to discuss potential projects with members of the ICB Executive Board if they are unsure of the procedure or the remit.

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POST AWARD

Student Eligibility	The awarding body for the ICB CDT studentships is the EPSRC. Students must therefore conform to the eligibility requirements laid down by the EPSRC, which normally means that the student must be a UK resident. All students must have a good honours degree (2.1 or above) in a physical sciences subject at MSci level (or equivalent).
Recruitment	Eligible students will be interviewed by the ICB-CDT Board and the project supervisors on ICB-CDT recruitment days in February (dates to be announced). It is the responsibility of supervisors to ensure that studentship places are filled by 31st June 2015. Any studentship that does not have a suitable student signed up at this time will be deemed to have forfeited the award, which will be reassigned to reserve projects – this deadline will be strictly enforced.
Supervision splits	All ICB students are registered in the Department of Chemistry. The lead supervisor must therefore be based in the Chemistry department. This can be a nominal supervisor (1%) and does not have to be listed on the application form. The data check is carried out in November and the supervision split can be adjusted accordingly then.
MRes	The 4 year program typically comprises a 1-year MRes followed by a 3-year PhD.
ICB events and EVOLVE program	The CDT program, under the administration of the ICB, involves colloquia, and student organised conferences. In order to encourage wide interactions we make attendance at these programs a mandatory requirement for both students and supervisors. Students must also attend CDT specific courses in transferable skills (one per year) and take part in the EVOLVE program. Through the EVOLVE program the student will spend a total of 2 months (in years 2-4) at a series of placements to support a key goal identified by each CDT student. Examples of such goals include engagement in the early stages of commercialisation of research they have pioneered, stimulating a new line of research not linked to their PhD or hosting an art exhibition for the general public to highlight the impact of research. EVOLVE is designed to give students workplace based experience of entrepreneurial activities, policy making, media/outreach, industrial research, or research within international academic institutions to meet a specific goal decided by the student. EVOLVE is supported from the outset by over 30 affiliated organisations who are committed to hosting students, provide mentoring advice and offering placement training.
ICB membership	With the award of a studentship, supervisors automatically become ICB members and you will be approached by the CDT management regarding ICB responsibilities chosen on the application form (see Annex).

ANNEX

ICB Research Board Members

Alan Armstrong	Department of Chemistry, Imperial College London
Mauricio Barahona	Department of Bioengineering, Imperial College London
Laura Barter	Department of Chemistry, Imperial College London
Oscar Ces	Department of Chemistry, Imperial College London
Charles Coombes	Department of Surgery & Cancer, Imperial College London
Stuart John Dunbar	Syngenta
Paul French	Department of Physics, Imperial College London
Matt Fuchter	Department of Chemistry, Imperial College London
Ian Gould	Department of Chemistry, Imperial College London
Mike Hann	GlaxoSmithKline
David Klug	Department of Chemistry, Imperial College London
Rob Krams	Department of Bioengineering, Imperial College London

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Nicholas Long	Department of Chemistry, Imperial College London
Steve Matthews	Department of Life Sciences, Imperial College London
Mark Neil	Department of Physics, Imperial College London
Michael Schneider	Head of Cardiovascular Science, Imperial College London
John Seddon	Department of Chemistry, Imperial College London
Paul Smith	Procter & Gamble
Michael Stumpf	Department of Life Sciences, Imperial College London
Ed Tate	Department of Chemistry, Imperial College London
Andrew Thomas	AstraZeneca
Ramon Vilar	Department of Chemistry, Imperial College London
Keith Willison	Department of Chemistry, Imperial College London
Rudiger Woscholski	Department of Chemistry, Imperial College London

ICB core activity to be listed on the application form. Choose at least one activity you agree to be responsible for if you are awarded a studentship.

1. Organise a cross campus / cross university event
2. Organise ICB colloquium
3. Organise a careers seminar
4. Organise industry workshops
5. Contribution to MRes taught training (e.g. lectures, BioLab, group learning seminars)
6. Write ICB badged grants
7. Contribution to the CDT newsletter/ website
8. Act as tutor at a transferable skills course
9. Act as member of judging panels at events such as the CDT Den competition
10. Act as an member of an ICB expert panel to mark future proposals
11. Organise technology show case events / SME workshops
12. Mentoring CDT students through the EVOLVE journey
13. Act as a cohort mentor for 1 year (includes visiting students at residential courses)
14. Other