Step-by-Step Guide to the Application Process.

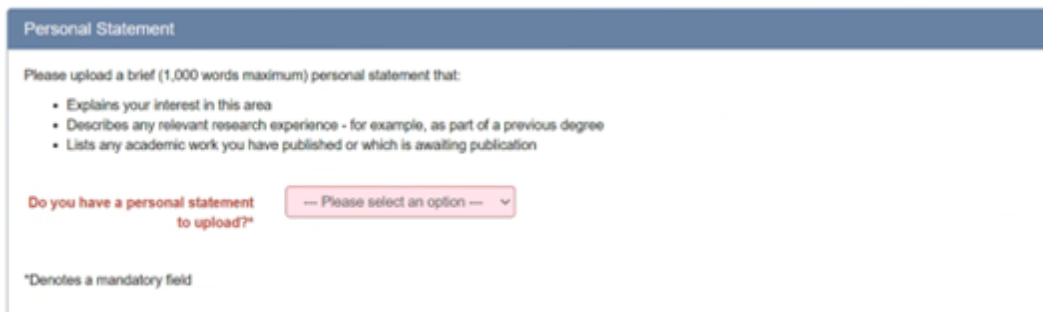Please register and apply via the QMUL admissions portal. Details of what to include in this online area are explained below.

We are hosting an online Q&A session for any queries you may have on your application on the 9th and 16th Dec 2024. Further details and joining instructions will be provided shortly.

Qualifications

Include details of your qualifications achieved so far, including module results, final degree results or predicted degree results.
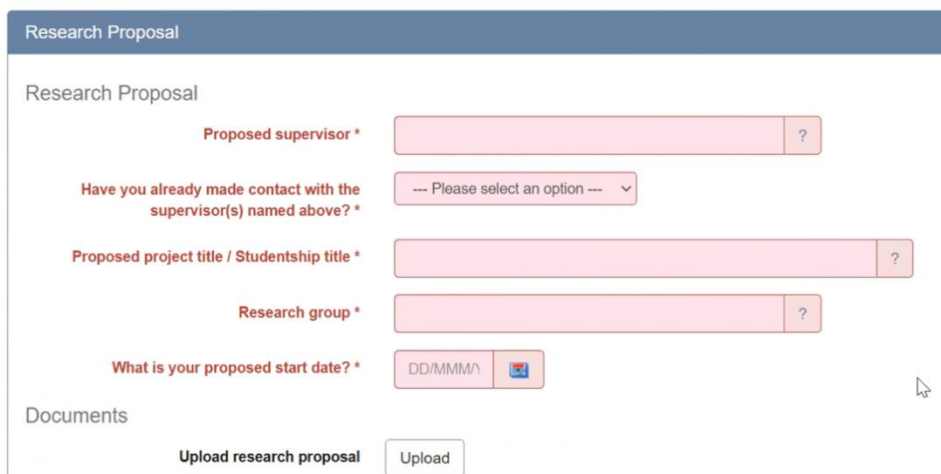
Personal Statement

Please **only** include your motivation for studying a PhD project within the Centre for Doctoral Training in Next Generation Organ on a Chip Technologies (COaCT) Programme at QMUL and your relevant research experience.

Research proposal

List the CDT coordinator 'Prof Julia Shelton' as Proposed Supervisor.

Add 'CoaCT CDT training programme' as Proposed project title.

Add 'CoaCT CDT training programme' as Research group.

Proposed start date September 2025.

Upload research proposal:

List the **5 projects** you are most interested in, from the list below, and upload them as a document saved as

your name-list of projects clicking on *Upload File* button

List of projects to select from

- Development of a vascularised muscle-tendon inflammation-on-a-chip model
- An organ-chip model of inflammation in the canine cartilage-synovium interface
- Effect of mechanical environment on immune cell invasion within an organ-chip
- Tissue-in-a-tube bioreactor screening of bioresorbable composites for bone repair
- Development of a dual synovial joint and heart organ-on-a-chip model for investigating heart disease in Rheumatoid arthritis and testing new therapeutics
- Generation and testing of a cutting edge organ-on-a-chip technology for polycystic kidney disease
- Engineering of adipose bone marrow niches of acute myeloid leukemia for safety and efficacy testing
- Vaginal probiotics for reproductive health: microbiome organ-chip
- Investigating immune dysfunction in 3D microfluidic models of inflammatory skin disease
- Personalised vessel-on-a-chip technology to stratify patients for coronary artery disease preventions.
- Artery-on-a-chip technology to identify patients with life-threatening heart disease
- Development of a human hepatocyte culture for measuring drug metabolism and elimination to replace animal models used in drug testing
- A multi-organ model for breast cancer metastasis to bone and liver
- *in silico* wound healing models using scar-on-a-chip platforms
- Biosensor functionalised organ-chip platforms for improved versatility of predictive in vitro models
- Multi-scale electromechanical cardiac fibrosis digital twins: from cellular to organ-scale predictions