

PROGRESSION OPPORTUNITIES AT QUEEN'S UNIVERSITY BELFAST



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RUSSELL GROUP

qub.ac.uk



Queen's University is an exciting place. A place that delivers both local and international impact.

This makes us a global top 200 university* and one of the UK's leading universities for Pharmacy, Medicine and Science.

Based in Belfast, our campus is in the heart of a modern capital city known for its welcome, accessibility and affordability. It is a great place to live and work and we are immensely proud of what our city and university offers our international students.

Queen's has a long and proud history of working with many institutions and partners across the globe. The Chinese population in Northern Ireland has a rich history of cultural inclusion and our global campus community at Queen's is a friendly, multicultural and safe environment.

From the day you arrive at Queen's, you will be part of a world-class international university with a thriving postgraduate culture built on teaching excellence, leadingedge research, innovation, collaboration and engagement.

These components are woven together in our Graduate School to deliver a truly integrated experience.

You will receive an educational experience that is research-led, learning from academics who are global leaders in their field, and you will benefit from a range of academic and professional opportunities available through our global connections.

Links with over 250 partner institutions across the world, and ongoing collaboration with over 3,000 local, national and international employers, will help you develop and make an impact on the world.

For all these reasons I do hope you choose Queen's for an outstanding postgraduate experience – we look forward to welcoming you and ensuring that your time here becomes the platform for a truly wonderful, exciting and fulfilling career.

Professor Ian Greer President and Vice-Chancellor

Queen's University Belfast

*QS World University Rankings 2020



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QUEEN'S UNIVERSITY BELFAST

Queen's was established by Royal Charter in 1845 and is the ninth oldest University in the UK. Part of the Russell Group, it is one of the UK's leading research intensive universities ranking in the top 200 universities in the world (QS World University Rankings 2020). As a Queen's student you will join a University that is truly international. Queen's has been named the 24th most international university in the world and have students from over 82 different countries, helping to create a multicultural and vibrant campus.

From the day you arrive at Queen's you will be part of a world-class international university with a vibrant post-graduate culture built on a foundation of exceptional teaching, cutting edge research, innovation, collaboration and engagement.

SHAPING A BETTER WORLD SINCE 1845

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Queen's University Belfast

QUEEN'S: A LONG HISTORY OF WELCOMING CHINESE STUDENTS TO BELFAST

OUEEN'S LOVES CULTURE

Queen's has a long history of welcoming Chinese students to Belfast. The Chinese population of Northern Ireland has a rich history of cultural inclusion and Queen's global campus community is a friendly, multicultural and safe environment.

There are many opportunities for CQC graduates to enter onto postgraduate courses at Queen's Schools in Belfast. Queen's will also operate student exchange programmes in the student's final year in CQC so that our students in Shenyang gain the full Queen's experience.





BELFAST FRIENDLY **AFFORDABLE** AMBITIOUS

BELFAST

Belfast is a modern capital city, welcoming, easy to get around and an inexpensive place in which to live and study. As Belfast flourishes as a global food, culture, arts and shopping destination, Queen's is positioned in the beating heart of the city's social and economic pulse. The Queen's campus is an exciting landscape that reflects its 170 year history and its 21st century vision.



A LOW COST OF LIVING

Belfast is more affordable than every other major student city in the UK (Mercer, 2016)

At an average of £46 per week, Belfast was found to have the cheapest weekly rent than anywhere else in the UK and the average student's weekly food shopping bill comes to £16, well below the national average!



STUDENT PROFILE

Sijin Li

PhD Pharmacv Material and Advanced Technologies for Healthcare



My name is Sijin Li, a PhD Student in The School of Pharmacy at Queen's University Belfast. My supervisor is Professor Colin McCoy and my study is on the use of selfcleaning materials using changes in chemical environment to trigger drug release.

I completed my undergraduate degree at the China Queen's College in BSc Pharmaceutical Science. I choose to study my postgraduate at Queen's University Belfast as I had a wonderful time in my four years at CQC and really appreciated the help of the teaching staff. Queen's cares about their students not only in their study but also in their normal life and we were taken very good care of in our undergraduate degree.

l attended a summer program run by Queen's University Belfast last summer and it offered me a great opportunity to get involved in the city of Belfast and the academic atmosphere in Queen's. Belfast is a liveable city and life here is really enjoyable.

I hope to have a happy postgraduate experience here at Queen's and graduate smoothly three years later!





Queen's University Belfast

PHARMACY POSTGRADUATE TAUGHT

The School of Pharmacy at Queen's has been consistently listed as one of the leading centres for pharmacy education and research in the UK.

MSc Industrial Pharmaceutics

OVERVIEW

Queen's University Belfast has developed a dynamic new MSc programme for students seeking careers in the global pharmaceutical industry. The new MSc in Industrial Pharmaceutics will prepare graduates with the expertise and skills required for employment in an industry estimated to be worth \$1.2 trillion. Industrial pharmaceutics plays a vital role in the development, validation and manufacture of new medicines and MSc graduates will be able to avail of employment opportunities at all stages of the medicine development pipeline.

The School of Pharmacy at Oueen's has an excellent global reputation and is highly ranked for both teaching and research. Active areas of research within the School include Drug Delivery and Biomaterials. Infection and Antimicrobial Resistance,



Nanomedicine and Biotherapeutics, and Pharmaceutical Materials

CONTENT

The MSc programme consists of 6 taught modules designed to produce highly-skilled graduates in continuous manufacturing science and technology. It includes specialist content designed to meet the needs of leading pharmaceutics companies as they develop new products and undertake cuttingedge Research and Development.

Science and Formulation.

As well as developing methodsbased and problem-solving expertise in the fields of Pharmaceutical Sciences & Technology, the programme includes a 3-month research project which can be undertaken with an industrial partner to gain further commercial experience and prepare for future employment.

MODULES

Formulation of Pharmaceutical and Biopharmaceutical Products

This module develops concepts from basic science. leading up to advanced pharmaceutical formulations and biopharmaceutical products. Module content will encompass the process of developing pharmaceuticals and biopharmaceuticals in a variety of dosage forms, and routes of administration.

Project Management and Entrepreneurship

The fundamentals of project management and entrepreneurship are the main module topics, including how to apply the principles of project management to a pharmaceutical project. In addition, students will be able to undertake a Chartered Management Institute Level 7 Certificate (equivalent to a Master's degree) in Strategic Management and Leadership within

the Oueen's Graduate School.

Quality Assurance and Regulatory Affairs

This module provides an understanding of the challenges faced by the pharmaceutical industry as companies strive to develop new products. It also equips the students with modern product development and manufacturing solutions that conform to industry best practice and modern Quality by Design (QbD) principles.



Research Methods and Data Management

This module will provide students with the key skills and knowledge to pursue academic research at the postgraduate and professional level.

WHY QUEEN'S

Aligned to Industry

The course has been specifically

Top performing students will be

selected to undertake research

within the UK. This presents an

pharmaceutical environment.

opportunity to work towards a

Management and Leadership

through the Queen's Graduate

School as part of this programme.

CMI Level 7 Certificate in Strategy

Additional Oualifications

Students will also have the

exciting opportunity for students

projects within an industrial partner

designed to provide highly

skilled, work-ready graduates

who meet the needs of the

pharmaceutical industry.

Opportunities for

Industry Internships

Characterisation Methods of Pharmaceutical Products

This module introduces students to a wide range of techniques used in the qualitative and quantitative analysis of pharmaceutical products, including physiochemical characterisation, in vitro and in vivo testing. It will equip students with modern product development and solutions that reflect current industry best practice.

Pharmaceutical Manufacturing and **Emerging Technologies**

This module brings together several of the key scientific and engineering concepts. The module will introduce a broad understanding of pharmaceutical manufacturing technologies, the rules that govern pharmaceutical manufacturing and the guidelines on how these rules are applied.

MSc Research Project

Students will be able to undertake their research project within an area of expertise within the School. or alternatively, undertake a workbased project which will increase awareness of the commercial applications of the programme.



CAREERS

Graduates from this course will be able to pursue a career in a range of areas, such as;

- Pharmaceutical Industry (e.g.R&D, production, regulatory)
- Academia (research and teaching)
- Government agencies such as drug licensing authorities
- Healthcare
- Scientific Research



Oueen's University Belfast

PHARMACY POSTGRADUATE RESEARCH

RESEARCH IN THE SCHOOL OF PHARMACY

Our Commitment to Research

The School of Pharmacy is one of the UK's leading centres for research in Pharmacy and Pharmaceutical Sciences. Research focuses on making real-world improvements for patients through our expertise in pharmaceutical science and practice. The School of Pharmacy at Queen's is home to a vibrant community of world-class researchers working to improve patient healthcare, both locally and internationally.

RESEARCH THEMES

1. Nanomedicine and Biotherapeutics

Research in this theme focusses on the development of novel technologies and targeted



- Anticancer Therapeutics
- Nano-delivery of Macromolecules
- Natural Peptides
- Proteases in Disease





2. Pharmaceutical Materials Science and Formulation

Research in this theme is focused on the design, development and industrial translation of novel systems for patientfocused administration of difficult-to-deliver drugs. Researchers concentrate on the development of formulations to address major global issues around sexual and reproductive health, use of hot melt granulation and polymer extrusion/injection moulding technologies to produce solid dosage forms, multi-lavered and targeted drug delivery systems, the use microneedles for transdermal drug delivery, patient monitoring and vaccine delivery, implantable delivery systems and ocular therapeutics. Areas of activity in this research theme include:

- HIV Prevention and Multipurpose Prevention Technologies
- Pharmaceutical Technology
- Solid Dosage Forms

3. Drug Delivery and Biomaterials

Research in this theme is focused on the development of materials which interface with the body and provide enhanced functionality, such as drug delivery, infection resistance or monitoring of levels of drug or host markers. In this theme, research activities are concentrated on the development of new methods for fabricating materials for medical device manufacture including biomaterials with enhanced antiinfective and biocompatibility properties. Sensor research focuses on sensors immobilised in biocompatible scaffolds, bloodfree diagnosis/patient monitoring using microneedles and developing point-of-care tests for microbial infection. Areas of activity in this research theme include:

- Photoactive Biomaterials
- Polymeric Medical Devices
- Sensor Development

4. Infection and Antimicrobial Resistance

Research in this theme is focused on improved prevention, detection and treatment of infection. Research in this theme focuses on preventing the development of antimicrobial resistance through improved antimicrobial stewardship, improved detection of infection using molecular and sensor based technology, prevention of infection using novel anti-infective biomaterials and enhanced infection prevention and control strategies and improved treatment of infection through discovery of novel antibiotics and antibiotic adjuvants and markers for better evidencebased decisions on antibiotic selection. Areas of activity in this research theme include:

- Antimicrobial stewardship
- Novel antimicrobials and anti-infective biomaterials
- Respiratory Infectious Diseases

5. Healthcare Delivery and Medicines Optimisation

Research in this theme is focused on the development and implementation of interventions that improve the health outcomes of patients in primary and secondary care. Research activities are concentrated on improving systems of patient care in all health care sectors with a focus on the appropriateness of prescribing in chronic disease and in care home residents with dementia. and medication adherence in children. Areas of activity in this research theme include: Clinical Paediatrics

- Quality of Care in Vulnerable Populations
- Systems of Healthcare Delivery

"I really appreciate that Queen's University Belfast gives me a good chance to study and do the experiments with so many brilliant people. The equipments and labs are so advanced that I can conduct further research."

Zhixuan Yang

PhD Student, School of Pharmacy

STUDENT PROFILE

Fengyu Zhang Nanomedicine and Biotherapeutics (Anticancer Therapeutics)



Hi, my name is Fengyu Zhang. I graduated from China Queen's College in 2018. Now, I'm doing my PhD in Queen's, and I feel really lucky and satisfied. Staff here really cares about their students, and take care of them well. Since I'm doing PhD, I spend most of my time in the lab, doing experiments and reading papers.

Colleagues are professional and always willing to help, and I'm now getting more and more comfortable in the lab.

Apart from my study, I feel that living in Belfast is also a great experience. There are several Chinese supermarkets and about Chinese restaurant all around, where I can find Chinese cuisine that I missed so much. People in Belfast are hospitable, which makes me feel that I'm a part of this city rather than a stranger.

I have lots of friends who used to be my undergraduate classmates, and we can cook and chat together at weekend, so I won't feel homesick. If you are thinking about come to UK for further study, I would say Queen's is a wonderful choice to make.

MEDICINE, HEALTH AND LIFE SCIENCES POSTGRADUATE TAUGHT

MSC ONCOLOGY DRUG DISCOVERY

PROGRAMME OVERVIEW

The Oncology Drug Discovery MSc course takes academic and biotech research knowledge and applies it to the development of 21st century health care. There is an increasing need for graduates both locally and nationally, who can undertake lab based research, and translate it into improved knowledge and skill sets for research both inside and outside the academic community.

This programme is designed to provide an insight into how existing and future drug targets are identified from biological samples isolated from the cancer clinic. This will include an industrial viewpoint into what makes an interesting target and how, through an iterative process, this target is validated.

With strong links forged between the local biotech industry and the Centre for Cancer Research and Cell Biology (CCRCB) the identification, validation and development of novel drug targets is gathering momentum. Within Queen's University Belfast we have established links with Almac Discovery, CV6T and Fusion Antibodies. These links have significantly enhanced the capacity of the Drug Discovery Unit within the CCRCB to bring forward interesting new therapeutic targets and generate a training programme for students which provides an excellent insight into the drug discovery pathway.

MODULE DETAILS

KEY FACTS

- Research Translation from Concept to Commercialisation (full year)
- Diagnosis and Treatment of Cancer
- Cancer Biology
- Target Identification and Development in Drug Discovery
- Drug Optimization, Drug **Delivery and Clinical Trials**
- Research Project and Dissertation

COST

Tuition Fees: £20.800

CAREER PROSPECTS

We have an international reputation in this area, achieved through: highimpact peer review publications significant international research funding, the establishment of successful spin-out companies. This programme offers an excellent opportunity to gain training in key skills required to find employment in the current pharma industry. It will also provide an excellent background for accessing further academic education.



Recent graduates have gone on to roles such as; Formulations Analyst, Norbrook; Right First Time Specialist, Pfizer; Research Associate at Zymergen, Inc; Technical Support, Qiagen; Validation Scientist, BD Bioscience; Quality Assurance, Baxter International: Associate Scientist, Abbott.

KEY FACTS MODULE DETAILS

Biotechnology

Bio-entrepreneurship

in the Biosciences

Literature Review

and Function

COST

Nucleic Acid Structure

Tuition Fees: £20.800

CAREER PROSPECTS

This MSc will enable you to

including commercial, industrial

and healthcare applications of

pursue a range of careers

research at PhD level.

Protein Structure and Function

Foundations for Research

PROGRAMME OVERVIEW Biotechnology is the exploitation

MSC MOLECULAR BIOLOGY

AND BIOTECHNOLOGY

of living systems or molecules from them for commercial gain. Modern biotechnologies rely on our increasing ability to manipulate organisms at the genetic level and include novel waste treatments and bioremediations, new pharmaceuticals, the exploitation of enzymes in 'green catalysis' and exciting new diagnostic techniques.

In the 20th century our lives were transformed by information technology; the 21st century may see an equally great transformation, but this time led by biotechnology. This Master's degree aims to teach the fundamental molecular bioscience underpinning biotechnology along with examples of its current applications.

This MSc is taught by researchactive staff members in the School of Biological Sciences. In addition, fundamental biological research skills are taught and students are given an understanding of bio-entrepreneurship. The degree culminates in a three-month, intensive research project in a laboratory in Queen's, thus preparing graduates for a career in research biotechnology.



Oueen's University Belfast



MEDICINE, HEALTH AND LIFE SCIENCES POSTGRADUATE TAUGHT

MSC (RES) EXPERIMENTAL MEDICINE

PROGRAMME OVERVIEW

The MSc in Experimental Medicine offers advanced research training in a broad range of laboratory based biomedical sciences.

Experimental medicine aims to identify mechanisms of pathophysiology of disease, and demonstrate proof-of-concept evidence of the efficacy and importance of new discoveries or treatments. It spans fundamental research in the biosciences to the application of new strategies towards clinical translation that will improve delivery of healthcare.

There is an increasing need for graduates who can undertake basic and clinical research, and translate it into improved medical treatments for patients.

Students can choose from specialist modules in 'Infection, Inflammation and Immunology' or 'Diabetes and Cardiovascular Medicine'.

This is a research intensive MSc programme in Experimental Medicine equipping students with the rigorous research skills, and the innovative mentality to tackle major medical and therapeutic challenges of the 21st century.

KEY FACTS

MODULE DETAILS

Fundamental Research Skills in Experimental Medicine
Specialise in one of two optional Research Streams

Diabetes and Cardiovascular Medicine Stream
Infection and Immunity Stream
Research Project
Dissertation

Students will be taught and mentored within the Centre for Experimental Medicine, which is a brand new purpose-built institute at the heart of the Health Sciences Campus.

This building represents a significant £32million investment by the University and boasts state-of-the-art research facilities which are supported by the world-leading research-intensive faculty, ensuring that all of our postgraduate students are exposed to a top-guality training experience.

COST

Tuition Fees: £20,800

CAREER PROSPECTS

The programme is designed for students wishing to pursue a career in experimental medicine, whether it is in academia, clinical practice, industry or government. The programme will also provide an excellent platform for progression to PhD programmes either in Queen's or worldwide.



MSC CANCER MEDICINE

PROGRAMME OVERVIEW

The MSc(Res) in Cancer Medicine offers a broad range of experience across multiple disciplines, demonstrating how precision medicine can improve and shape future cancer treatments.

Dedicated research projects will provide students with a hands-on experience of the latest molecular technologies, in a state-of-the-art laboratory environment. Students will be able to evaluate how novel therapeutic approaches can be used to stratify patients into different treatment groups for better clinical management. They will observe the delivery of precision medicine through tours of the Northern Ireland Cancer Centre.

There are optional modules in thesecond semester allowing students to explore the fundamental principles of carcinogenesis and the translational approaches (including cutting edge technologies) which allow cancer scientists and clinicians to advance our understanding and treatment of cancers. The Precision Cancer Medicine stream provides a comprehensive overview of the current understanding of the hallmarks of cancer from the role of genetic/epigenetic alterations, cell cycle control and metastases/angiogenesis to the development of applications to

help diagnose cancers earlier, improve treatments, rationally design clinical trials and reduce chemotherapy drug resistance. The Radiation Oncology stream will develop skills in understanding the biological principles of radiotherapy and its clinical applications in the treatment of cancer. This will include the physical and chemical basis of radiation interactions and the biological consequences of radiation exposures. Clinical aspects of Radiation Oncology will be covered including principle of advanced radiotherapy delivery, cancer imaging techniques and biomarker discovery.

Importantly, both streams show how our improved understanding of the molecular processes driving cancer growth and spread can be 'translated' through research-intensive MSc projects to improve the treatment and survival of cancer patients.



TACKLING CANCER, RESPIRATORY CONDITIONS AND EYE DISEASE THAT AFFECT POPULATIONS WORLDWIDE, ENSURING ADVANCES CAN HELP FIGHT A RANGE OF CONDITIONS

KEY FACTS

MODULE DETAILS

Research Translation: From Concept to Commercialisation
Diagnosis and Treatment
Cancer Biology
Precision Cancer Medicine Stream

Cancer Genetics and Genomics
Translational Cancer Medicine
OR

Radiation Oncology and MedicalPhysics (ROMP) Stream• Biology of Radiotherapy• Clinical Radiation• Research Project and Dissertation

COST Tuition Fees: £20,800

CAREER PROSPECTS

This MSc (Res) will produce high calibre candidates who can thrive in academic, healthcare delivery or Bio-industry sector. This programme aims to train future

Inis programme aims to train future leaders in biomedical science, medicine and biotechnology, in addition to providing opportunities for progression into academia.

MEDICINE, HEALTH AND LIFE SCIENCES POSTGRADUATE RESEARCH

The School of Medicine, Dentistry

addressing key global challenges

breakthroughs in mechanisms

of disease, translating these

to innovate therapeutics and

preventative interventions to

improve patients outcomes.

We drive research excellence

that have been identified in

- The Oueen's University

and Health Sciences.

of Belfast Joint College are

and impact delivering innovative

healthcare. Students graduating

eligible to apply to the following

research stream within Medicine

from China Medical University

solutions to the specific challenges

in healthcare by making scientific

and Biomedical Science is

RESEARCH THEMES

CANCER RESEARCH AND CELL BIOLOGY

The global burden of cancer is increasing and incidences expected to be 15 million new diagnosis each year by 2020

The Centre for Cancer Research and Cell Biology (CCRCB) at Oueen's University Belfast is attuned to this global health issue and specialises in integrating academic discovery, industrial/ commercial enterprise and innovative health care practice to promote effective delivery of precision cancer medicine, to improve patient health and outcomes, generate wealth and alleviate suffering.

multi-disciplinary teams focusing on cancers of Gastrointestinal, Prostate, Breast and Ovarian origin. Each team incorporates diseasespecialist clinicians, accredited molecular pathology expertise bringing affiliated biobank tissue repositories, and academics skilled in the art of (i) biomarker discovery and bioinformatics. (ii) biological investigation and therapeutics development, and (iii) the prosecution of early-phase translation-driven clinical trails.

CCRCB has established successful

Postgraduate research Opportunities available in:

- Advanced Radiotherapy
- Blood Cancers • Brain Tumour
- Breast Cancer
- Gastro-Intestinal Cancer Genito-Urinary and Prostate Cancer
- Genomics
- Ovarian Cancer

EXPERIMENTAL MEDICINE

The Wellcome-Wolfson Institute for Experimental Medicine (WWIEM) is committed to research excellence by making scientific breakthroughs in the mechanism of disease, which we translate to innovate therapeutics to improve patient outcomes.

The Wellcome-Wolfson Institute For Experimental Medicine at Queen's, are an international hub of excellence on eve disease. infectious diseases and respiratory disease with a core emphasis on immunology, molecular cell biology and patient-based investigations. It comprises three main research themes focused on Immunology and Microbes, Respiratory Medicine, and Vision and Vascular Medicine and Postgraduate Research Opportunities are available in the following areas:

- Immunology
- Microbes
- Infectious disease
- Respiratory Medicine
- Cystic Fibrosis
- Eye Disease
- Stem Cell Biology
- Cardiovascular Disease

STUDENT PROFILE

Wang Lu PhD Student, School of Pharmacy



Hi, my name is Wang Lu, and I am a PhD student at Queen's University of Belfast. I used to Queen's student in CQC, when I was an undergraduate student. That period time was really amazing, and I accepted the same courses as the local students of Belfast. What impressed me the most is that teachers always encourage and guide us, and they can always teach vividly and make the classroom active.

I continued to study at Queen's not only because Queen's gave me a good impression, but also due to my supervisor have taught me when I was an undergraduate student. I know her very well, I think it would be very pleasant to follow her. I really appreciate that Queen's University has given me a chance to Queen's for giving me the opportunity to know myself better and be more confident.



IN THE WORLD FOR INTERNATIONAL RESEARCH COLLABORATION

The Faculty of Medicine, Health

University Belfast has a reputation

and Life Sciences at Oueen's

for excellence in research and

this is reflected in our position

interdisciplinary research and

with one another, and with

partners outside academia to

yield solutions to some of the

in our interdisciplinary Global

Research Institutes and Pioneer

Research Programme to ensure

we have a critical mass of world

class research and leadership to

Through expansion of

international partnerships,

we continue to deepen our

and academic institutions.

existing strategic partnerships

with international companies

funding and recruitment,

take on major societal challenges.

world's most difficult problems.

We are currently heavily investing

supports researchers in working

UK for Research Intensity.

The Faculty encourages

in the top ten Universities in the





Oueen's University Belfast

APPLY How to apply for PhD at Queen's University Belfast

RANKED 24TH WORLD'S MOST INTERNATIONAL UNIVERSITIES

ENTRANCE REQUIREMENTS

Graduate:

The minimum academic requirement for admission to a research degree programme is normally an Upper Second Class Honours degree from a UK or ROI HE provider, or an equivalent qualification acceptable to the University.

English Language Requirements:

Evidence of an IELTS* score of 6.0, with not less than 5.5 in any component, or an equivalent qualification acceptable to the University is required.

*Taken within the last 2 years.

S INTERNATIONAL FEES

For students enrolling in 2020–21 the tuition fees are as follows:

£16.950

Course and Level of Study:

FR2 (Laboratory) £21,300

Please note fees relate to

one year of study only and

additional costs may apply.

International Scholarships:

welcoming students from all

over the world and helping them

Queen's is committed to

to achieve their ambitions.

FR1 (Classroom)

The University's International Scholarships for 2020–21 will be announced soon.

For more information visit: go.qub.ac.uk/intlschool

"I'm currently completing analytics with patients who have diabetic kidney disease. It takes years for someone to get kidney disease but once it happens it is very serious. We are working on a biomarker to help with early detection of the disease which will help more people in the long term"

Jinnan Zang PhD Student, Centre for Experimental Medicine

STEP-BY-STEP GUIDE TO YOUR PHD APPLICATION

tuition fee rates and

procedures for the payment

of fees can be found on our

website: www.qub.ac.uk

Step 1: Check you meet the entry requirements Check that you meet, or expect to meet the academic and if applicable, English language entry requirements for your chosen programme on our website: www.qub.ac.uk Depending on your chosen area of research, professional qualifications or experience may also be taken into consideration For some programmes, an interview, admissions test or the submission of written work may form part of the selection process

Step 2: Consider Funding If you are not in receipt of Step 3: Identify a research financial support, you theme and potential research should ensure that you are supervisor(s) fully aware of the financial Our world-class academics commitments and that you provide research students with have the necessary excellent supervision. If you are resources to cover the cost of fees and maintenance for the duration of your studies. Information on

considering a research degree, you will need to identify a research theme and a research supervisor. To identify a research theme, find the school and research theme relevant to your area of interest. Familiarise yourself with our staff profiles via: go.gub.ac.uk/PhDSupervisor

Step 5: Gather Supporti To make sure your application is processed in Step 4: Get in Touch the fastest possible time, Prepare a research overview you must scan and upload and email it to the team at: , supporting documents askmhls@qub.ac.uk along with your application At this stage, it would be We may not be able to make useful to identify which a decision on your research theme you are application until we have interested in and your received all your relevant potential supervisor(s). documents. We will make contact with a

supervisor on your behalf

communication via phone,

email or skype with the

designated supervisor

which may require additional

ting Line Step 6: Apply Online le, Applications should be submitted online via the Postgraduate Applications tion. New applicants wil

Portal. New applicants will need to register via the Portal to create an application account. Important – please ensure that the email address you provide is correct and active, as this will be used by us to communicate the progress of your application to you. Apply online via: qub.ac.uk



STAFF PROFILES

Professor Denise Fitzgerald School of Medicine, Dentistry and Biomedical Science

MULTIPLE SCLEROSIS: REVERSING THE DAMAGE

Denise leads a £2 million research programme investigating how to reverse the damage caused by Multiple Sclerosis. Her team are working to understand how Myelin, the insulating layer that surrounds nerves in the central nervous system, can be repaired, potentially restoring function and improving the quality of life of people with MS.

The goal is to identify new strategies to treat MS and other inflammatory and demyelinating disorders. We are particularly interested in myelin regeneration (remyelination) and aim to identify novel therapeutic targets to promote remyelination. To do this, we uncover new knowledge of how the immune system influences CNS stem cells and tissue regeneration. targets to promote remyelination. To do this, we uncover new knowledge of how the immune system influences CNS stem cells and tissue regeneration.

Professor Ryan Donnelly School of Pharmacy

MICRONEEDLES: ENHANCING DRUG DELIVERY

Professor Ryan Donnelly's name is synonymous with tiny objects that make a huge impact – microneedles. These minute projections in a patch take the sting out of injections. Professor Ryan Donnelly is a Pharmacist with research interests in drug delivery and pharmaceutical formulation science.

The principal focus of his Research group is on microneedle systems and is centred on design and physicochemical characterisation of advanced polymeric drug delivery systems for transdermal and topical drug delivery, with a strong emphasis on improving therapeutic outcomes for patients. Ryan says, 'In drug delivery, taking the needle out of the equation for vaccination is one of the grand challenges for global health. Also, 60% of newly-discovered drug molecules fail to reach the market because they're too water-insoluble.

These microstructures painlessly penetrate the skin. They're so small that they don't cause any bleeding and they don't stimulate any nerves'.



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WHY BELFAST?





Northern Ireland's population is one of the youngest in Europe



Belfast: happiest city in the UK (Office of National Statistics, 2016)

WHY QUEEN'S?



Ranked 173 in the world (QS World University Rankings, 2020)



Queen's is ranked joint 8th in the UK for research intensity (REF 2014/ Times Higher Education)



Queen's Universty is ranked among the 10 most beautiful universities in the UK (Times Higher Education, 2018)

GET IN TOUCH

CONTACT A MEMBER OF OUR TEAM DIRECTLY WITH ANY QUESTIONS OR QUERIES YOU MAY HAVE

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