



QUEEN'S  
UNIVERSITY  
BELFAST

SCHOOL OF  
BIOLOGICAL  
SCIENCES



# WORK PLACEMENT AND EMPLOYABILITY PROGRAMMES

SHAPING A  
BETTER  
WORLD  
SINCE 1845

RUSSELL  
GROUP

# WORKING WITH QUEEN'S



**RUSSELL  
GROUP**



**WORLD LEADING  
RESEARCH JOINT 8TH  
IN THE UK FOR  
RESEARCH INTENSITY**  
(REF 2014/ TIMES HIGHER EDUCATION)



**QUEENS IS RANKED IN  
THE TOP 160 IN THE  
WORLD FOR  
GRADUATE PROSPECTS**  
(QS GRADUATE EMPLOYABILITY  
RANKINGS 2019)



**STUDENTS FROM 78  
DIFFERENT COUNTRIES**

**#1**

**FOR AGRICULTURE IN  
THE UK**  
(COMPLETE UNIVERSITY GUIDE 2023)

**#4**

**FOR FOOD SCIENCE IN  
THE UK**  
(COMPLETE UNIVERSITY GUIDE 2023)

**#9**

**FOR BIOLOGICAL  
SCIENCES IN THE UK**  
(COMPLETE UNIVERSITY GUIDE 2023)

# WELCOME TO QUEEN'S SCHOOL OF BIOLOGICAL SCIENCES



The School is one of the largest Schools within Queen's University Belfast and our education portfolio teaches our students on some of the most fundamental global challenges facing humankind.

Our School is concerned with human, animal, plant and environmental health, sustainable exploitation of living resources, food security and rural development.

We attract the best staff and students from Northern Ireland and around the world, and continue to produce graduates who are making a real and lasting impact in fields as diverse as agriculture, bio-pharmaceuticals, food science, infectious diseases, marine sustainability, animal science, ecological and environmental management.

A key part of the School, is the Institute for Global Food Security, which has a vision that it becomes recognised as a global exemplar of interlinked research delivering

innovative solutions to the key challenges facing farming, food, and health practice in society. It is already ranked number one in the UK for Research Intensity (REF2014) and 1st for Agriculture, Veterinary and Food Sciences (REF2022) we aspire to continue our cutting edge research across the School of Biological Sciences.

## Meet the Team

### Dionne Alexander

Careers and Work Placement Consultant  
Focus on: Ecology, Sustainability and Animal related areas

### Grace Heatley

Careers and Work Placement Consultant  
Focus on: Agricultural Technology, Food Science and Life Sciences

### Katie Torbitt

Careers and Placements Clerical Officer



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# EMPLOYABILITY ENGAGEMENT: GET INVOLVED

From first year through to making that transition out of University life - we support and encourage students to develop their confidence, skillsets and to explore the various job markets related to the life sciences and beyond.

Queen's School of Biological Sciences dedicated Careers and Placement Team work with students to help explore options and to encourage participation in a range of career development activities.

## School of Biological Sciences Careers Services

An extensive range of services are offered to students including:

- Preparing for a transition to year-out placements, graduate employment or postgraduate study
- Decisions about life after graduation and options with your degree
- Tailored information on vacancy sources within your area of interest
- Assistance in preparing a CV, applying for jobs and interview skills
- Helping you to develop your employability and skills through tailored workshops and programmes
- Access to our LinkedIn account which provide an opportunity to connect with alumni, view job opportunities and information posts

## Year Round

### Graduate Recruitment

We collate graduate roles and promote these year round with a monthly newsletter.

The Graduate School website is the gateway for postgraduate students to access resources, support, events and much more.

## September

### Mentoring

Over the years we have recognised the importance of students having access to industry professionals. This access to experienced mentors will support students in learning about career options, developing skills and building a network of connections to support in their career journey.

We have successfully matched students across our undergraduate and postgraduate programmes to mentors from broad areas of:

- Consultancy
- Research
- Conservation
- Food Science
- Environmental Agencies
- Health Science
- Business Management

The mentoring allows each mentor and mentee to discuss and agree aims and goals from the programme and plan out best ways to reach these. This could include:



- Career Development
- Presentations and Public Speaking
- Interviews and Pitches
- Business Start-Up
- Building Networks
- Recruitment and Training
- Increasing Confidence
- Problem Solving
- Organisation and Planning

Applications open and close in September each year with mentoring beginning in November.



## October-January Employers Deliver Talks to Students

As part of placement and graduate preparation we offer the opportunity for organisations to engage with students via talks, site visits and networking events.

Please get in touch with the team if you would like to get involved.

## October

### Autumn Careers Fair

The Autumn Careers Fair is held each academic year with a focus on graduate and placement roles starting Summer of the following year.



## January Environmental Conservation Careers Fair

We host an annual careers fair exclusive to School of Biological Sciences with prominent organisations in the industry attending to engage with students on careers, volunteering and placements.

Contact the team for details if you would like to exhibit or attend.

## February

### Spring Careers Fair

The Spring Careers Fair provides students the opportunity to chat with employers offering work experience including placements, internships and voluntary opportunities, as well as graduate roles.



"I had a wonderful experience with my mentor. Frances was so supportive and encouraging. She really listened to everything I had to say and valued my contribution to our meetings. I feel very lucky and grateful to have been paired with her."

"I would highly recommend this programme after the amazing experience I have had."

Stephanie McClune  
MSc Parasitology and Pathogen Biology  
Mentee with Almac

## May Spotlight on Life Sciences Tour

The Spotlight on Life Sciences Tour aims to provide students with an opportunity to find out more about career areas and opportunities in the biopharmaceuticals and life sciences sector.

## My Future

A tailored and personalised portal for students and employers. Promoting events, jobs, volunteering, placement opportunities and career information. Use it to search, view, book and apply to jobs, events and appointments.

## Future Ready Award

The Future-Ready Award is an opportunity for any current student to gain accreditation for completing extra-curricular work related learning. We have over 100 accredited activities available, including global opportunities.

The award enables you to articulate your learning and signals to employers that you have developed essential skills required to succeed in the workplace.

# WORK PLACEMENT PROGRAMMES

The School recognises the importance that gaining relevant experience has to our students to support developing skills and a bright career.



Ellen's Placement Experience

SCAN ME



All students have the option to add a placement onto their degree programme and this is viewed as being one of the most important aspects of the degree, enabling students the opportunity to experience jobs in preparation for graduation.

Securing graduate employment is competitive! So gaining as much experience as possible is vital during your time at Queen's. Each year over 250 students (increasing annually) are opting to integrate a work placement into their studies.

The School operates the most diverse work experience programme in the University and when work placement is undertaken it is an assessed component of the degree course. Assessment is based on how our students develop appropriate graduate level skills, apply aspects of their academic learning, and develop career and project management skills.

We have a dedicated placement team to support students and we are continually increasing our links with organisations both locally and internationally to provide high quality opportunities for our students.

## Placement Timeline

With a dedicated school placement team on hand to support student and employer through all stages the process is simple and supportive. A guide to the placement process is highlighted below although please note we are able to offer flexibility.

### Year Round

#### Placements advertised to students

October - March the key timeframe.

Contact the Placement Team for information and support in advertising your vacancy.

Employer provides job description for the placement opportunity to be advertised for students to apply to.

### October

#### Students begin sourcing placements

Support completing application forms, CV, cover letters as well as interview skills preparation available.

### November - March

#### Placement interviews undertaken by employers

We can offer space to hold interviews on site.

### April - August

#### Majority of postgraduate placements commence

Leadership for Sustainable Development and Leadership for Sustainable Rural Development commence earlier (see table right).

Placement team co-ordinates agreements and deal with any queries.

### May - September

#### Undergraduate placements commence

Placement team co-ordinates agreements and deal with any queries.

### Year round

#### Queen's staff visit

Depending on the placement duration, Queen's staff will visit and review placement progress at least once but are available to contact at all times.

## Undergraduate Placement Programmes

The below BSc programmes are also available as MSci except Environmental Management and Agricultural Technology.

Subject	Duration	When
Agricultural Technology	12 - 14 Weeks or Year Placement	<u>12 - 14 weeks</u>
Biochemistry	Year Placement	Commences May/June to September
Biological Sciences	12 - 14 Weeks or Year Placement	<u>Year Placement</u>
Environmental Management	12 - 14 Weeks or Year Placement	Commences the end of second year starting from June to September
Food Science and Nutrition	12 - 14 Weeks or Year Placement	(It is an option for students to split the year placement between two different placement hosts)
Marine Biology	12 - 14 Weeks or Year Placement	
Microbiology	Year Placement	
Zoology	12 - 14 Weeks or Year Placement	

## Postgraduate Placement Programmes

Subject	Duration	When
Animal Behaviour and Welfare	12 Weeks	April - August
Ecological Management and Conservation Biology	12 Weeks	April - August
Leadership for Sustainable Development	Three 8 Week Placements	January - March April - June July - August
Leadership for Sustainable Rural Development	16 Weeks	January - June
Molecular Biology And Biotechnology	12 - 14 Weeks	May - August

Alice Heminsley, UGA



“I am always so impressed with the dedication, work ethic, flexibility and commitment these students bring to our team. This is a 50-week placement, so it is a big leap for students, and they jump right in ready to contribute... Working with the Queens team has also been a very positive experience!”

Nina Sassano  
Educator and Student Program Coordinator, UGA Marine Extension and Georgia Sea Grant

# A SUPPORTED PROGRAMME FOR EVERYONE

## Employer Support

Dedicated adviser available at all times for all stages from advertising your opportunity, recruiting students and placement advice throughout the year.

We conduct a minimum of one placement visit to employers and students.

We have a tailored direct hub where support and guidance is available year round.

## Employer Benefits

There are many benefits of hosting a placement student to your organisation:

- Cost effective extra resource with relevant knowledge and skills
- New ideas and fresh perspectives in the workplace
- A means of training and evaluating placement students for potential graduate opportunities
- Developing links with Queen's University Belfast, can lead to additional partnerships
- Students bring new skills and knowledge of modern practices and technologies
- Provide existing staff the opportunity to develop supervisory skills through mentoring a student on placement

## Preparing for Placement Success

Provide the student with an induction to your organisation. We recommend you include:

- An overview of the organisational structure
- Provide a detailed job description to promote to students. If a student is recruited – details are formally agreed in advance of placement commencing
- Ensure the work undertaken enables the student to carry out any assessments as part of the course
- Provide a set of clear aims and objectives for the student based on the agreed duties
- Ensure that standard insurance/ indemnity information and health and safety detail is provided in advance of placement commencing
- Students receive relevant health and safety professional standards and wellbeing information
- On commencement of placement ensure that our student receives an induction and appropriate training in relation to health and safety

Get In Touch:

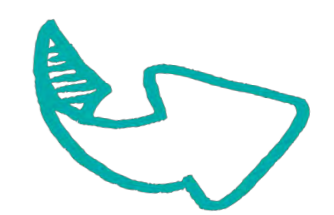


SCAN ME

- Training in the use of equipment and systems which the student will use
- Meet with the student regularly to monitor their progress and discuss future development
- Meet with staff from Queen's when we visit and complete an assessment on performance
- Inform the Placement team of any concerns regarding the student whilst on placement

## Supported Students

Our students receive tailored support before, during and after their placement. Ensuring they are well prepared for placement.



# COMPLETELY SUPPORTED STUDENTS

## Benefits

There are many benefits of completing a placement year:

- Improved chances of securing a graduate-level job - Students who participate in careers events and employer workshops are more likely to land a graduate role (based on Graduate Outcomes 17/18, 15 months after graduation)
- A clearer understanding of what careers you wish to pursue
- Experience of the job application process
- Opportunity to integrate academic theory and practice
- Makes you more employable through developing transferable and technical skills
- Increased confidence, motivation and professionalism
- Start to develop your own networks and contacts by getting acquainted with experts in your field
- Valuable insights into industry culture and commercial awareness
- Heightened self-awareness through reflection
- Experience of other cultures

## Requirements

Students must be enrolled on the professional studies version of their course by the end of week two in second year.

## Fees & Funding

Fees and available funding are liable to change each year. For up to date information visit the university's [Fees and Funding Page](#) and the [Student Finance Website](#).

## Salary

The average salary of a placement student in the UK 2023 was £20,558 according to [Rate My Placement](#).

When choosing a placement make sure to consider practical costs such as accommodation, utilities, transport, insurance etc.

## Travel Bursaries

For placements abroad you may be eligible to receive the [Turing Grant](#). Queen's will apply for funding, and then depending on how much is received, all eligible students will be contacted. The amount you receive will depend on where you're going and for how long.

Queen's also offers several travel scholarships. Requirements for these and information on how to apply can be checked by visiting the [Scholarship Opportunities](#) page.

## Sourcing Placements

Help to secure a placement is provided each step of the process and includes:

- Tailored support in groups and one to one career advice to help students make decisions about work placement and options within their degree
- Dedicated learning and support completing application forms, CV, cover

letters as well as interview skills preparation

- Students have access to a placement management system which has been developed specifically for our school
- 1000's of vacancies are continually sourced and advertised directly to our students within our school each year



## International Opportunities

The school has developed strong partnerships with employers in over 20 countries. Students have previously worked across Europe, Australia, Asia, Africa and the Americas.

For EU and international placements information on funding supports will be made available and includes a suite of resources, placement preparation materials and guides.

## Assessment

Students are issued details in advance on assessment requirements. Undergraduate assessment is designed for the student to relate academic theory to the workplace. Postgraduate assessment will consist of a research project.

## Further Support

There is access for students to [wellbeing services](#), [disability services](#) and [international student support services](#) before and during placement.

# UNDERGRADUATE PLACEMENT PROGRAMMES

- |                             |                               |
|-----------------------------|-------------------------------|
| 16 Agricultural Technology  | 24 Food Science and Nutrition |
| 18 Biochemistry             | 26 Marine Biology             |
| 20 Biological Sciences      | 28 Microbiology               |
| 22 Environmental Management | 30 Zoology                    |



DTU AQUA

*Jon C Svendsen*





# AGRICULTURAL TECHNOLOGY

Agricultural Technology students investigate how government policy, consumer demand, environmental impact as well as food quality and safety concerns impact agricultural production.

This course has been carefully developed by academics with employer and industry involvement and runs in conjunction with CAFRE to ensure students have the practical skills, knowledge, and experience to progress prosperous careers.

“I finished my year’s workplacement with Alltech and KEENAN. The busy year was filled with different experiences, learning, networking and engaging in different areas of the business. The diverse roles have demonstrated to me the opportunities within the company.”

“The highlight of my year was attending the European Biogas Conference in Birmingham and exhibiting our stand at the Biogas Expo. We then travelled to the largest Biogas plant in the UK for a tour.”

Adam Smyth (pictured right)  
BSc Agricultural Technology Student , Placement with Alltech

## Core Content

Modules taught in this course include:

- Applied animal and crop science
- Mechanisation and farm buildings
- Business, marketing, management and entrepreneurship
- Sustainable agriculture and global Issues
- Livestock management and farm animal health and welfare



## Graduate Roles

The majority of our graduates will seek careers in the agricultural, agri-food or agri-environment sectors or related industries.

Past graduates have gone on to roles, such as;

- Meat, Dairy and Poultry Farm Quality Assurance
- Trainee Farm Management
- Farm Liaison and Support

- Industry related farm trials
- Agri Sales and Business Development Activities
- Plant Breeding, Harvesting and Crop related roles
- Business Development Executive
- Horticulture or Agronomy
- Animal Health, Feeds and Nutrition
- Agricultural Stakeholder Organisations
- Research Technician
- Agricultural Research Institutes working on a broad range of agri-research projects



#1

FOR AGRICULTURE IN THE UK

(Complete University Guide 2023)

## Timeframe

Short Placement  
Commences May / June for 12 – 14 weeks

Year Programme  
At the end of second year commencing from June for 40 weeks

## Key Contact

Grace Heatley  
g.heatley@qub.ac.uk



“Placing Queen’s University students on dairy farms in New Zealand for their practical work placements, has been overwhelmingly positive. Queen’s students have demonstrated a high level of professionalism throughout the placement programme and come prepared with the necessary skills and knowledge.”

“Hosting Queen’s students has enhanced our reputation as a company committed to education and professional development of our next generation for not only the benefit of the NZ dairy industry while here but also the industry back in Ireland when students return with international experience. Hosting Queen’s students also provides us with access to a pool of talented young farmers who may become future employees.”

Trina Moore  
Recruitment Manager, Max People

# BIOCHEMISTRY

Biochemistry students explore and examine the structures, functions and biological roles of molecules involved in metabolism, cell signalling and the transmission of genetic information. Available as [MSci](#).

This course has been designed so that students develop the core skills and sector related experiences that are valued by employers, professional organisations and academic institutions, particularly analytical and numerical skills.

“My placement has given me the opportunity to understand and experience the drug product lifecycle before it has entered the market. I was able to expand my GMP knowledge and inter-personal skills.

I was surprised by how much I enjoyed it. I was sort of a little bit nervous, like ‘I’m going into the working world,’ but I absolutely loved it.”

“It’s really great to be able to tell yourself that I’ve done this and I can do it going forward after graduation.”

Catherine Carey (pictured below)  
MSci Biochemistry Student, Placement with Thermo Fisher Scientific

## Core Content

Modules taught in this course include:

- Fundamentals Chemistry
- Experimental Biochemistry
- Organic and Bioorganic Chemistry
- Molecular Basis of Life
- Genetics and Molecular Tool Box
- Microbial Metabolism and Biocatalysis
- Biomolecules in Health and Disease
- Immunology and Immunotherapy
- Advanced Cell Biology

## Graduate Roles

Students from our Biochemistry course can gain employment in growth areas such as the biotechnology, food and pharmaceutical industries, biomedical research, the NHS and research and development in academia and industry. Approximately one third of our graduates go on to further study before entering specialist employment.

Past graduates have gone on to roles, such as:

Laboratory Based roles include:

- Biotechnology, Food Sector and Pharmaceutical Industries
- Biomedical Scientist



- Health Research and Development
- Scientific Officer/Technician – Laboratory and/or Field
- Quality Assurance
- Clinical Trials

Non-Laboratory Based roles include:

- Regulatory Analyst
- Business Development
- Science Education or Teaching
- Communication / Consultancy
- Technical / Scientific writing



“It is rewarding to see our placement students grow in confidence as they develop their knowledge and skills whilst also making a valuable contribution to our mission to Advance Human Health.”

“Students who complete an industrial placement have a competitive edge by gaining practical and professional work experience in their chosen field upon graduation. At Almac, an industrial placement gives students an opportunity to work in an innovative, dynamic environment and, with expert mentorship and training, to learn best practice in a global, world-leading pharmaceutical organisation. It’s the perfect way to further develop technical skills and accelerate their career path to fulfil their potential.”

Dr Frances Weldon  
STEM Outreach Manager, Almac

## Timeframe

Year Programme  
At the end of second year commencing from June t for 40 weeks

## Key Contact

Grace Heatley  
g.heatley@qub.ac.uk



# BIOLOGICAL SCIENCES

Biological Sciences students examine many aspects of the biosciences, from molecular biology through to whole organisms and ecosystems. Available as **MSci**.

This course ensures students will gain core technical skills and subject specific practical laboratory / field-based skills to help them investigate and manipulate biological material. Students will receive training in relevant physical, chemical, and biological methods and their application in a laboratory, field, and research project setting.

“I definitely have gained confidence in a range of skills, and a range of transferable skills, including communication, organisation and leadership skills. My role was mainly project management so within that there is a lot to learn including stakeholder management and also time management, which is really important.”

“Be open minded to the different opportunities that exist besides, let’s say, the academic world and the research world. Be bold and explore all the opportunities that come at you.”

**Natasha Matveychuk**  
BSc Biological Sciences, Placement with Roche



**#9**  
FOR BIOLOGICAL SCIENCES IN THE UK  
(Complete University Guide 2023)

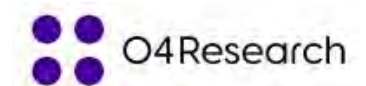
## Timeframe

Short Placement  
Commences May / June for 12 – 14 weeks

Year Programme  
At the end of second year commencing from June for 40 weeks

## Key Contact

Grace Heatley  
g.heatley@qub.ac.uk



## Core Content

Modules taught in this course include:

- Biological diversity, systematics and conservation
- Cell and tissue structure, function and physiology
- Ecology and behaviour
- Form and function of microorganisms, protists, fungi, plants and animals
- Genetics and mechanisms and pathways of evolution
- Immunology and immunotherapy

## Graduate Roles

Our graduates are employed in organisations working within research and development, environmental monitoring and management, water quality management, animal welfare, academic research, the agri-food industries, biotechnology and pharmaceutical industries, teaching and education, and science communication.

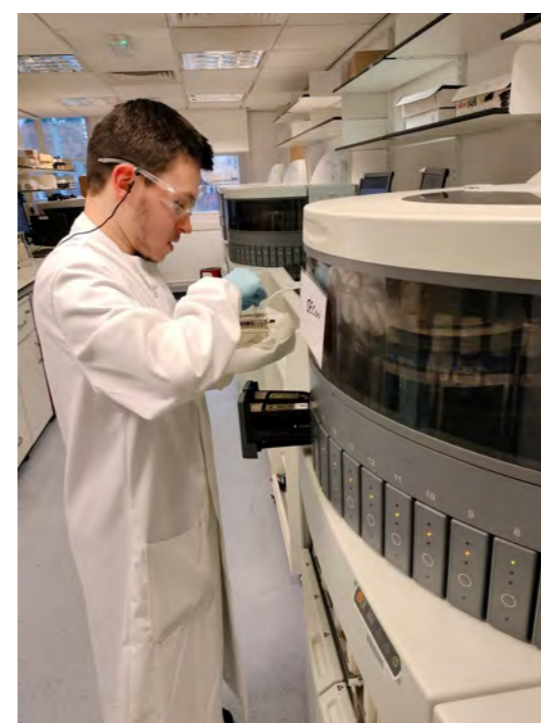
### Laboratory Based roles include:

- Pharmaceuticals
- Biotechnology
- Environmental monitoring
- Animal and plant health

- Analytical testing laboratories
- Plant and crop science
- Healthcare organisations such as the NHS
- Publicly funded research organisations
- Clinical trials

### Non-Laboratory Based roles include:

- Regulatory affairs / Consultancy
- Business development
- Science education
- Communication
- Higher education institutions



“Based on our experience, we wholeheartedly recommend other businesses to consider hosting Queen's students. Not only does this enhance outreach to graduates, but it also brings novel skills and fresh perspectives to the table.”

“The calibre of the students from Queens is exceptionally high, and we consistently encounter enthusiastic, diligent, and professional placement students. Furthermore, it's gratifying to see some of these students return to us following their graduation, having completed a placement with G&L Healthcare Advisors.”

**Rachael O’Kane** (pictured above)  
G&L Healthcare Advisors, Regulatory Affairs Manager

# ENVIRONMENTAL MANAGEMENT

Environmental Management students explore the physical, social, economic and cultural aspects of environmental management to understand the environmental systems in which we live and work.

Students will gain core knowledge in science, geography and environmental planning along with acquiring the skills to manage and critically evaluate project work.

“I think the placement year was really positive... Having that chance to do one is something I don't regret at all.”

“I got to network with a lot of external organisations as well as internally within Translink. Some of the external ones were Keep Northern Ireland beautiful, Business in the Community and DAERA ... Getting a feel for what they do with Translink and how they all work together to create the outcomes that they want, was really positive. Also, just the careers management that I took away from it, it's definitely set me up positively for the future when applying to jobs.”

**Rachel McCann**  
BSc Environmental Management Student, Placement with Translink

## Core Content

Modules taught in this course include:

- Physical geography
- Environmental sciences and economics
- Environmental management, covering the integrated and holistic nature of land use
- Planning health and well being
- Sustainable development, conservation and environmental protection
- Landscapes and geographical information (GIS)



## Graduate Roles

Students studying Environmental Management gain core technical skills which allow them to have diverse careers, not only in the rural and land use industries and government services, but also in private sector industries, financial institutions and agribusiness concerns of various kinds.

Past students have gone on to roles, such as:

- Environmental management (private and public sectors)
- Consultancy
- Environmental impact assessment
- Surveying
- Conservation
- Waste management,
- Ecological impact assessment
- Policy and legislation



“Within DTU Aqua, my group is researching coastal topics including habitat restoration, biodiversity recovery, fish abundance, coastal protection, and harbor designs. The overarching objective is to recover biodiversity, fish abundance and enable sustainable fisheries.

Queen's students have contributed significantly to our coastal research projects. [They] have engaged in our fieldwork efforts to provide crucial data for our projects.”

“Working with Queen's students is good and inspiring. They bring curiosity and motivation to the research group. I would recommend Queen's students.”

**Jon C. Svendsen**  
Senior scientist, Technical University of Denmark (DTU Aqua)



## Timeframe

Short Placement  
Commences May / June for 12 – 14 weeks

Year Programme  
At the end of second year commencing from June for 40 weeks

## Key Contact

Dionne Alexander  
d.alexander@qub.ac.uk



**Belfast City Council**



# FOOD SCIENCE AND NUTRITION

Food Science and Nutrition students gain knowledge and understanding, and experience cutting-edge technologies involved in food production, research, and consumption. Available as [MSci](#).

This course is accredited by the Institute of Food Science and Technology and has been co-created alongside industry stakeholders to ensure students understand the farm to fork food journey, the 'fitness for purpose' in food appearance, texture, and flavour, and how to ensure the nutritional integrity of food to support human health.

"Placement has provided me with an insight into the workings of a global company, and allowed me to get a flavour of how a large-scale fast paced manufacturing consumer goods production plant is run.

"The experience has helped me implement and expand my knowledge that I learned in university, and gave me a further understanding of the importance of quality teams within the food and beverage industry."

**Hannah Ferguson**  
BSc Food Quality, Safety and Nutrition Student, Placement with Diageo

## Core Content

Modules taught in this course include:

- Supply chain safety and security
- Chemistry and microbiology for food science
- Nutrition and physiology
- Food quality, innovation, diet & health
- Industrial food production, manufacture and analysis
- Food commodities, processing and hygiene
- Nutrition pathways in health and disease
- Sustainable food systems



## Graduate Roles

The majority of our graduates seek careers in the food industry, regulatory roles, health promotion, or health and nutrition. There are also a wide range of industries that skills developed on our food course are transferable to.

Past students have gone on to roles, such as:

- New Product Development
- Technical and Production Management



- Quality Assurance / Food Safety
- Auditory or Regulatory (BRC and SALSA)
- Supply Chain / Logistics
- Health Promotion / Sports Nutrition / Dietetics
- Buying / Procurement
- Business Development
- Nutrition and Food Science Education
- Waste minimisation and environmental management projects
- Food research within industry and research institutes working on a broad range of food science laboratory based projects



"Our experience with working with QUB on the work placement programmes have been excellent. The drive and ambition of our placement students have assisted our business to develop and grow.

We always aim to ensure the placement student gains a varied and valuable experience with growing responsibilities under close guidance as the placement progresses to ensure an enriched experience for both the student and the business."

**"We would highly recommend facilitating a placement student to benefit the business and to enrich the experience and capabilities of your team and the student themselves."**

**Anne Irwin**  
Managing Director, Suki Tea Makers

## Timeframe

Short Placement  
Commences May / June for 12 – 14 weeks

Year Programme  
At the end of second year commencing from June for 40 weeks

## Key Contact

Grace Heatley  
g.heatley@qub.ac.uk

**ifst**



# MARINE BIOLOGY

Marine biology students will learn how to apply cutting edge technologies to help tackle complex issues such as overfishing, pollution and climate change on a scale from molecules to ecosystems. Available as [MSci](#).

This course is designed to blend strong training in marine biology with core skills in the biosciences ranging from physiology and genetics through to conservation biology and global climate change.

“I’m definitely a lot more confident in my ability and my knowledge after coming back from placement. Being in Greece I got the chance to develop a lot as a person as it was my first time away from home. I also feel a lot better at managing projects.”

“It was just an overall great experience... All of my knowledge from university really kicked in when I got there and I felt part of the team straight way.”

Rachele Kempton  
BSc Marine Biology Student, Placement with AFBI & Archipelagos

## Core Content

Modules taught in this course include:

- Marine systems
- Biodiversity
- Microorganisms
- Microbiology
- Environmental, vertebrate, coastal and oceanic biology
- Animal physiology
- Genetics

This taught content is complemented by an array of extra-curricular activities such as Work-shadowing PhD students and dedicated skills-development workshops at our marine laboratory.



## Graduate Roles

The broad-based approach of the course allows students to explore a range of career opportunities within both biological sciences and marine biology fields.

Past students have gone on to roles, such as:

- Marine area protection and conservation



- Survey and sampling work
- Water quality monitoring
- Population studies
- Field and desk based research
- Marine Consultancies
- Coastal Management
- Aquaculture and Fisheries Management
- Lab based marine related research



“Placement students work directly with our team of Marine Education Fellows and are held at the same standard and expectations as the fellows. This includes collaborating to organize a Youth Ocean Conservation Summit, and implementing a personal project. Last year, our placement student built a bridge to a neighboring art university to blend art and science by bringing art students to our facility, teaching them about our coast, and hosting their work inspired by our facility in an expedition. This partnership and event will now continue to happen each year, thanks to the leadership of our placement student.”

“I’ve found that having a QUB placement student has been nothing but a positive experience. I would recommend it to anyone who has the capacity to host one!”

Nina Sassano  
Educator and Student Program Coordinator, UGA Marine Extension and Georgia Sea Grant

## Timeframe

Short Placement  
Commences May / June for 12 – 14 weeks

Year Programme  
At the end of second year commencing from June for 40 weeks

## Key Contact

Dionne Alexander  
d.alexander@qub.ac.uk



# MICROBIOLOGY

Microbiology students study bacteria, fungi, algae, protozoa and viruses, and their importance in relation to the environment, agriculture and food, biomedical sciences, and biotechnology. Available as **MSci**.

Students studying on the Microbiology course will be skilled to work competently within laboratories, complete project work both within a team and independently, provide analysis of data and communicate effectively. The course is linked closely to the Institute for Global Food Security and is taught by associated staff.

“Skills wise I have definitely become a lot more confident, both inside and outside the lab. I would be a lot more confident undertaking techniques I haven’t done yet, following protocols - all of those basics, and then indeed with some of the more specialist things that I was looking into. I did a lot of STEM outreach work... reaching out to schools, doing programmes and mentoring them from a STEM perspective.”

“I found my leadership, my communication, my confidence just in networking definitely increased... it was really beneficial.”

Abbey Horner (pictured right)  
BSc Microbiology Student, Placement with GSK



## Timeframe

Year Programme  
At the end of second year commencing from June for 40 weeks

## Key Contact

Grace Heatley  
g.heatley@qub.ac.uk



## Core Content

Modules taught in this course include:

- Fundamentals of microbiology
- World of microorganisms
- Microorganisms in action
- Diagnostic microbiology
- Microbial metabolism and biocatalysis
- Molecular genetics and bioinformatics
- Zoonoses
- Parasitology
- Microbiome: Biotechnological applications and ‘omic manipulations
- Medical microbiology

## Graduate Roles

Our Graduates are qualified to take up both scientific and non-scientific careers, and industries that recruit include biomedical, industrial and government organisations, as well as Universities and Colleges of higher education. Students from our Microbiology course have skills which open them up to a wide range of roles. Our students regularly take up placements in both laboratory and non laboratory based areas such as:

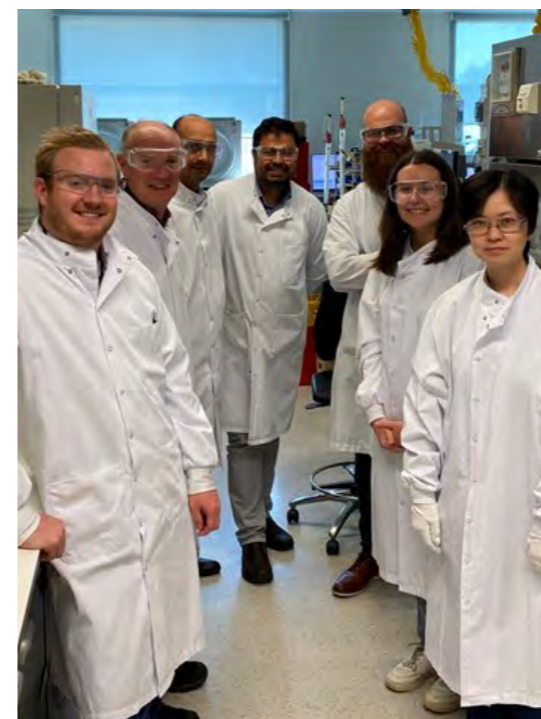
### Laboratory Based roles include:

- Waste treatment, recycling processes, pollution systems and green energy
- Pest control and animal

- pathogens in agriculture
- Clinical trials
- Biotechnology, food and pharmaceutical industries
- Biomedical / health research and development

### Non-Laboratory Based roles include:

- Regulatory affairs or consultancy
- Business development
- Scientific writing and publishing
- Communication and marketing
- Technical support and quality control



“Students in the laboratory are fully trained in procedures which is an asset to securing future employment. We have recruited students after placement on this basis.”

“Work placement is an opportunity for students to experience the highs and lows of a full time job. To learn the different aspects of working in industry... To be acquainted with the importance of implementing Health and Safety... To increase their confidence when they undertake full time employment.

This benefits the laboratory by employing staff with more confidence and knowledge of a commercial working environment and less training required in laboratory techniques.”

Jennifer O’Brien  
General Manager, Sci-Tech Laboratories

# ZOOLOGY

Zoology at Queen's aims to provide students with a broad coverage of the biology of animals and how they interact with other living organisms. Available as [MSci](#).

Zoology students study physiology, genetics, biology, ecological and conservation, while developing the core skills that are valued by employers. This ranges from laboratory skills to social and project management skills.

"My placement was with Ulster Wildlife. They're the largest local conservation charity in Northern Ireland and I was with the Marine Department. So, it was slightly different than the main zoology [department] but the skills and the practical work were amazing and a great opportunity for me.

It was all very supportive and everybody was willing to help because they all had the same goal of helping nature and bringing people to nature."

**"100% would do it again, no doubt in my mind. It's been a fantastic year."**

Jade Kirkpatrick  
MSci Zoology Student, Placement with Ulster Wildlife



## Core Content

Modules taught in this course include:

- Biodiversity
- Genetics
- Environmental biology
- Invertebrate biology
- Vertebrate biology
- Microorganisms
- Microbiology
- Comparative animal physiology
- Medical microbiology



## Graduate Roles

Students are qualified and keen to take up both scientific and non-scientific careers.

Zoologists at Queen's have the opportunity to avail of the strong international links with Universities in South Africa, America and Canada. In addition there is the opportunity to volunteer or carry out projects at many international sites including the elephant sanctuary in Thailand, African Wildlife rehabilitation centres and conservation in Namibia and South Africa as well as many other countries through Operation Wallacea.



## Timeframe

Short Placement  
Commences May / June for 12 – 14 weeks

Year Programme  
At the end of second year commencing from June for 40 weeks

## Key Contact

Dionne Alexander  
d.alexander@qub.ac.uk



Past students have gone on to roles, such as:

- Nature and Animal Conservation
- Innovative research and development of new products
- Advisory and consultancy work, particularly in companies or organisations concerned with animal and plant health
- Environmental Management
- Pharmaceutical Products
- Biotechnology



"The involvement of students in our volunteer program has brought a fresh perspective to the Sanctuary. Their passion for wildlife conservation and eagerness to learn have truly been inspiring. Whether they are assisting with animal care or participating in habitat restoration projects, their dedication and hard work have made a significant impact."

**"The positive impact of students participating in our volunteer program cannot be overstated. Their enthusiasm, dedication, and contributions have strengthened our sanctuary's mission and inspired all of us to continue our work in wildlife conservation. We are immensely grateful for their involvement and look forward to welcoming more students in the future."**

Janalene Kingshott  
Director of Animal Welfare, Aspen Valley Wildlife Sanctuary



# POSTGRADUATE PLACEMENT PROGRAMMES

34 Animal Behaviour and  
Welfare

36 Ecological Management  
and Conservation Biology

38 Leadership For Sustainable  
(Rural) Development

40 Molecular Biology And  
Biotechnology

AECOM



# ANIMAL BEHAVIOUR AND WELFARE

Our MSc Animal Behaviour and Welfare course aims to advance understanding of current and emerging issues in both Animal Behaviour and Animal Welfare.

“I had a fantastic time on my work placement. I worked with passionate and interesting people, put theory into practice and learnt things I would never have learnt in a lecture theatre.”

“My placement was at Trouw Nutrition Ireland, a combination of office work and on-farm research. Being given the autonomy to plan and carry out my own research, knowing I was making a valuable contribution to the business, was a huge confidence boost.”

**Eleanor Hewett**  
MSc Animal Behaviour and Welfare Student, Placement with Trouw Nutrition

## Core Content

With a range of topics to include animal behaviour from single-celled organisms, invertebrates to vertebrates. The fundamental importance to safeguard animal welfare.

This course covers a wide range of animals from insects to primates and learning of communication, ethics, conservation sensory systems and animal personality.

## Skills Developed

- Knowledge on key topics such as animal behaviour, animal welfare, experimental design
- Statistics and presentation skills

- Scientific method
- Ethics in research
- Scientific communication



## Placements Applicable to Students

- Animal charities, zoos, wildlife parks, aquaculture, animal nutrition companies, health and nutrition product development.
- ⇒ Examples include Belfast Zoo, Dublin Zoo, USPCA, Ulster



Wildlife, Dogs Trust, Cats Protection, Archipelagos Marine Research Institute.

- Environmental protection agencies, environmental consultancies, government agencies and research institutions.
- ⇒ Examples include DAERA, Teagasc, AECOM, Conservation Detection Dogs.
- Medical and veterinary research, working animals, conservation, education, communication, policy and legislation.
- ⇒ Examples include AFBI, Shanaghan Veterinary Practice, Eurogroup for Animals, PAWS.



## Timeframe

12 Weeks  
Completed between April–August each year

## Key Contact

Dionne Alexander  
d.alexander@qub.ac.uk



“Working with students from Queen's University has been a very positive experience. These students bring diverse backgrounds, academic knowledge, enthusiasm, and a professional manner to their placements. Additionally, mentoring and supervising students during their placements has been a rewarding experience, as they have always been very pleasant and hardworking and eager to learn.”

“Overall, work placement program has been mutually beneficial for the organization and students alike, providing valuable learning experiences and contributing to the professional growth and development of all involved parties.”

**Peter Doyle**  
Research Officer, Teagasc

# ECOLOGICAL MANAGEMENT & CONSERVATION BIOLOGY

The course blends taught conservation biology with practical field-based ecological management practice with field trips throughout Semester 1 to build upon applied and practical learning.

“Throughout my placement I felt that Wild Work supported, guided, and encouraged me to work on improving my practical plant and bird I.D skills, as well as my communication and writing skills.”

“Being given the autonomy to plan and carry out my own research, reviews, and social media content was a huge confidence boost.”

Rachel Hayden  
MSc Ecological Management and Conservation Student, Placement with Wild Work

## Core Content

A broad range of taught and practical content in ecological management and conservation biology covering taxa from plants to mammals and environments from marine to terrestrial.

### Topics covered:

Biodiversity, Conservation genetics, Climate change, Emerging diseases, Environmental economics, Environmental Impact Assessment, Grassland management, Invasion biology, Marine conservation, Soils, Wildfire ecology

## Skills Developed

- Personal development and planning; presenting and

communicating scientific results.

- Problem solving, complex environmental issues systematically and creatively.
- Literature searching; referencing of literature; synthesis and collation; scientific writing; presenting an argument; independent learning skills.
- Survey design; selection of appropriate statistical tests; introduction to commonly used computer packages; GIS, Statistical Analysis.

## Placements Applicable to Students

Students can undertake a broad range of placements across the globe and



with a research project included this provides the opportunity to support the work of the organization.

### Placements can be across:

- Non-governmental organisations such as wildlife trusts; environmental and conservation groups; animal and wildlife protection charities.
- ⇒ Examples include Ulster Wildlife, National Trust, RSPB, Rewilding Europe, Dublin Zoo and many more.
- Government bodies both local and international working on

policy development, policy reviews, public engagement and regulatory roles.

- ⇒ Examples include DAERA, Scottish Government, NPWS, DEFRA.
- Environmental and Ecological Consultancies.
- ⇒ Examples include AECOM, RSK, RPS, Tetra Tech, Fieldfare Ecology.
- Research institutions
- ⇒ Examples include Teagasc, AFBI, Archipelago Marine Research Institute, Institute of Marine Mammal Observations, Universities

## Timeframe

12 Weeks

Completed between April– August each year

## Key Contact

Dionne Alexander  
d.alexander@qub.ac.uk



**AECOM**



“AECOM, and especially the ecology team at AECOM, have got an absolutely amazing relationship with Queens. We always try and get a work placement student during the summers and I was actually one of those work placement students nearly 5 years ago now.”

“Several of the people that we have working for us at the minute are Queen’s alumni and people in the past have been hired straight out of the placement programme. It’s just a great scheme in terms of being able to talk to students who are still in academia and being able to get fresh new ideas into the team.”

Paul Donaghey  
Ecologist, AECOM

# LEADERSHIP FOR SUSTAINABLE (RURAL) DEVELOPMENT

Our Leadership for Sustainable Development course is a masters programme for those who want to help turn the vision of a just and ecologically sustainable society into a practical reality.

Sustainable rural development is vital to the development and maintenance of a vibrant economy, quality of life and environmental viability. Rural areas often experience greater economic challenges than their urban counterparts, yet rural communities are well positioned to understand local needs, adapt to changing demands, address area-specific challenges and support sustainable diversification.

“This placement has been engaging, offering me immersive insights into professional environments, the maritime sector, and practical sustainability practices. It has solidified my passion for pursuing a career in sustainability and environmental management.”

Amy Smyth (pictured below)  
MSc Leadership for Sustainable Development Student, Placement with Belfast Harbour Commissioners

## Core Content

- Theories and practices of leadership and project management
- Climate change
- Waste and water management
- Renewable energy
- Environmental economics
- Environmental impact analysis

## Skills Developed

Students develop skills in leadership and management. This includes people and project management, and applying them to a range of problems in sustainable development.



## Placements Applicable to Students

Students develop knowledge on sustainable goals across a wide range of industries, sectors and practices.

Environmental Management (across a range of sectors):

- Waste and resource management
- Industry maintenance
- Monitoring of environmental regulations
- Environmental managements



## Timeframe

Jan – March  
8 weeks placement

Apr – June  
8 weeks placement

July – August  
8 weeks placement

## Rural Timeframe

16 Weeks  
Commences January/June each year

## Key Contact

Dionne Alexander  
d.alexander@qub.ac.uk



HENRY BROTHERS

Belfast Harbour

- systems (include ISO14001)
- Renewable energy projects

## Humanitarian:

- Improving equality, opportunities, quality of life, peace, justice and strong institutions

## Economy and Industry:

- Economic growth
- Green and conservational innovation

## Education and Health:

- Promoting sustainability communications and education to groups on practices
- Sustainable health practices



“We have found that placement students who are exposed to the day to day tasks and challenges that occur within organisations, take a lot from the placement opportunity and working across the full spectrum of the organization. One thing we ensure at Action Renewables is providing the opportunity for placement students to work across the entire organization and within multiple teams and departments.”

“We value the work our placement students provide and find the best have been those who show a hunger and keenness to provide support across the whole organization. Many of our team were initially here on placement and have been offered full time employment at the conclusion of their studies.”

James McKay  
Business Development Manager, Action Renewables

# MOLECULAR BIOLOGY AND BIOTECHNOLOGY

This master's degree aims to teach the fundamental molecular bioscience underpinning biotechnology along with examples of its current applications.

Biotechnology is the exploitation 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.

## Core Content

Modules taught in this course include:

- Biotechnology
- Foundations for research in the bioscience
- Nucleic acid structure and function
- Protein structure and function
- Bio-entrepreneurship
- Bioinformatics
- Mass spectrometry

## Skills Developed

- A range of scientific and laboratory methods and techniques
- Analysing and presenting results and data
- Projects management skills



## Placements Applicable to Students

Our Graduates develop knowledge and skills relevant to a wide range of roles in molecular biology and biotechnology including commercial, industrial and healthcare applications.

Past students have gone on to roles, such as:

- Formulations Analyst
- Research Associate
- Technical Support
- Validation Scientist
- Quality Assurance
- Associate Scientist



## Timeframe

Placement completed between May – August for 12 – 14 weeks

## Key Contact

Grace Heatley  
g.heatley@qub.ac.uk



afbi



“My spin-out company from QUB had a need for a short-term work placement student over last summer.”

“The MSc student we recruited proved to be a very competent scientist and a highly motivated worker during the placement and, as the company was on the look out for a full-time Research person, it was the logical progression to employ the student once they had completed their MSc degree.”

Irene Grant  
CSO, Rapid Myco

# KEY UNIVERSITY CONTACTS

## BIOLOGICAL SCIENCES CAREERS & PLACEMENT TEAM

Subject specific placement & careers information for Students and Employers

School of Biological Sciences  
Queen's University Belfast  
19 Chlorine Gardens  
Belfast  
BT9 5DL

Tel: +44 (0)28 9097 5787

Email: [biocareers@qub.ac.uk](mailto:biocareers@qub.ac.uk)

Web address: <https://www.qub.ac.uk/schools/SchoolofBiologicalSciences/Employability/>

LinkedIn: @QUB School of Biological Sciences Careers and Placement Office

Facebook: @School of Biological Sciences QUB

X: @qubbiocareers

## Dionne Alexander

Careers and Work Placement Consultant, focus on: Ecology, Sustainability and Animal related areas

Email: [d.alexander@qub.ac.uk](mailto:d.alexander@qub.ac.uk)

## Grace Heatley

Careers and Work Placement Consultant, focus on: Agricultural Technology, Food Science & Life Sciences

Email: [g.heatley@qub.ac.uk](mailto:g.heatley@qub.ac.uk)

## CAREERS, EMPLOYABILITY AND SKILLS

General placement & careers information for Students and Employers

One Elmwood Student Centre and Students' Union  
Queen's University Belfast  
Belfast  
BT7 1NN

Tel: +44 (0)28 9024 5133

Email: [careers@qub.ac.uk](mailto:careers@qub.ac.uk)

Web address: <https://www.qub.ac.uk/directorates/sgc/careers/>



“Being involved with the work placement programme with Queen’s has been extremely positive.”

“We have always received very clear communication from Queen’s, and the programme is organized well for both students and facilitators. All students we have hosted have been dedicated, hardworking and knowledgeable. They have worked effectively as part of the zoo team, showing willingness to learn and develop new skills.”

Gaining practical skills is hugely important, as it will equip students with necessary skills and experience they need to confidently pursue a career in this area.”

Polly Russell  
Zookeeper/Research Officer,  
National Reptile Zoo

## STUDENT FINANCE OFFICE

Fee's and Financial Information

One Elmwood Student Centre and Students' Union  
Queen's University Belfast  
Belfast  
BT7 1NN

Tel: +44 (0)28 9097 2767

Email: [studentfinance@qub.ac.uk](mailto:studentfinance@qub.ac.uk)

Web address: <http://www.qub.ac.uk/Study/Feesandfinance/>



## IMMIGRATION SUPPORT SERVICE

Student visas and immigration advice

One Elmwood Student Centre and Students' Union  
University Road  
Belfast  
BT7 1NN

Tel: +44 (0)28 9097 3820

Email: [iss@qub.ac.uk](mailto:iss@qub.ac.uk)

Web address: <https://www.qub.ac.uk/sites/iss/>

## DISABILITY SERVICES

Information relating to disability issues, and resources and services available

One Elmwood Student Centre and Students' Union  
University Road  
Belfast  
BT7 1NN

Tel: +44 (0) 28 9097 2727

Email: [disability.office@qub.ac.uk](mailto:disability.office@qub.ac.uk)

Web address: <http://www.qub.ac.uk/disability>

## WELLBEING SERVICES

Physical, mental, and emotional wellbeing support services

One Elmwood Student Centre and Students' Union  
University Road  
Belfast  
BT7 1NN

Tel: +44 (0) 28 9097 2893

Email: [studentwellbeing@qub.ac.uk](mailto:studentwellbeing@qub.ac.uk)

Web address: <https://www.qub.ac.uk/directorates/sgc/wellbeing/>

## STUDENTS' UNION ADVICE CENTRE

Independent money management, education, welfare and finance advice

One Elmwood Student Centre and Students' Union  
University Road  
Belfast  
BT7 1NF

Tel: +44 (0) 28 9097 1049/1166/1135

Email: [studentsunion@qub.ac.uk](mailto:studentsunion@qub.ac.uk)

Web address: [www.qubsu.org](http://www.qubsu.org)



“I have gained a lot of valuable insights from Tayto’s placement, from understanding the workings of a successful company through audits, document completion, daily meetings, taste panels and health and safety... I would highly recommend applying for a work placement.”

“I would suggest attending the QUB careers classes/ individual meetings as you get a better insight and direct contact details to companies.”

Catherine McMahon  
BSc Food Quality, Safety and Nutrition, Placement with Tayto Group NI



**QUEEN'S  
UNIVERSITY  
BELFAST**

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**SCHOOL OF  
BIOLOGICAL  
SCIENCES**

## **CONTACT US**

Email:

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Website:

[qub.ac.uk/schoolofbiologicalscience](http://qub.ac.uk/schoolofbiologicalscience)



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Sciences Careers and  
Placement Office