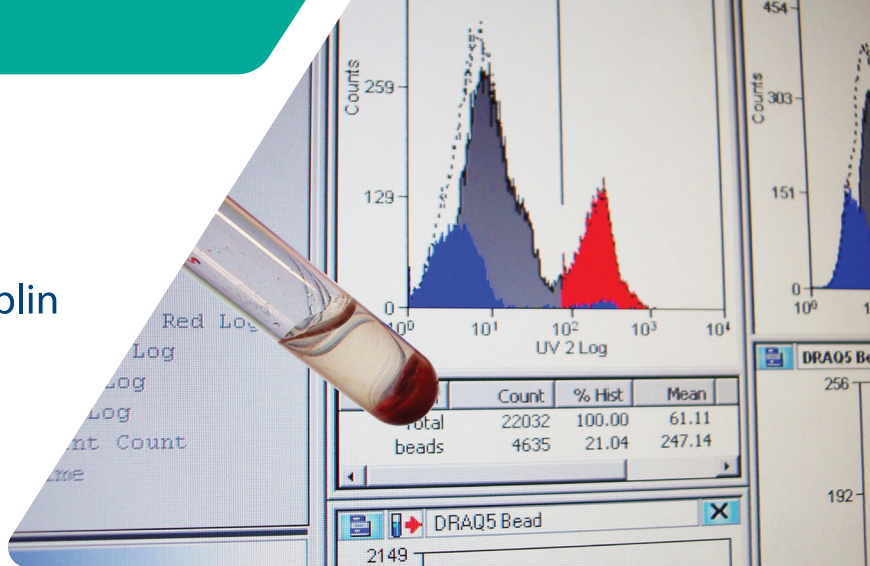




University College Dublin  
Ireland's Global University



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## MSc Biotherapeutics & Business (1 Year Full Time)

The MSc in Biotherapeutics and Business educates students on the practical uses of molecular advances in the discovery of proteins and other biomolecular drug candidates and their development into biotherapeutics. It will provide students with a comprehensive understanding of the development of biotherapeutics, beginning with pre-clinical modelling and target identification together with antibody engineering, biochemical and biophysical characterisation, and development issues for bioprocessing. Systems biology of biotechnological processes and approaches to the analysis of proteomics-based discovery data will be covered in detail,

together with mathematical modelling, bioinformatics analysis and data integration strategies. Regulatory issues, and innovation and commercialisation strategies, will also be covered. Mammalian cell culture and bioprocess laboratory structure will be comprehensively covered in addition to novel approaches to therapeutic development. You will also receive a comprehensive business education. You will learn to identify and solve business problems in local and international settings, enhance your communication and leadership skills, and improve your ability for independent thinking and developing creative solutions.

### Why study at UCD?



#### Tradition

Established 1854, with 160 years of teaching & research excellence



#### Global profile

UCD is ranked in the top 1% of higher education institutions worldwide



#### Global community

Over 6,000 international students from over 120 countries study at UCD



#### Global careers

Degrees with high employability; dedicated careers support; 1 year stay-back visa



#### Safety

Modern parkland campus with 24 hour security, minutes from Dublin city centre

### Key Fact

The programme is the result of a close collaboration between the UCD School of Biomolecular and Biomedical Science and the UCD Michael Smurfit Graduate School of Business, which is Ireland's leading business school.

## Course Content and Structure

90 credits  
taught masters

60 credits  
taught modules

30 credits  
project modules

The structure of the programme is as follows:

#### Semester 1

- Professional Career Development
- Management & Org. Behaviour
- Corporate Accounting & Finance
- Business of Biotechnology & Science
- Biotherapeutic Pipeline I
- Recombinant DNA Technology
- Biomedical Diagnostics
- High Content Screening Microscopy
- Pharmacology & Drug Development

#### Semester 2

- Professional Career Development
- Biotherapeutic Pipeline II
- Systems Biology in Drug Development
- Bioprocessing Laboratory
- Emerging Issues in Biotechnology
- Regulatory Affairs
- Microbial & Animal Cell Products

#### Semester 3

- Valuation and Commercialisation of Biotherapeutics
- Biotherapeutics Case Study

## Career Opportunities

This advanced graduate degree in Biotherapeutics and Business has been developed in consultation with employers and therefore will be recognised and valued by them. A key feature is the opportunity to carry out a business development plan, which will allow graduates to develop connections with prospective employers, thereby enhancing chances of employment on graduation.

Prospective employers include: Abbott; Allergan; Amgen; Baxter Healthcare; Eli Lilly and Co.; Dignity Sciences; GlaxoSmithKline; Icon Clinical Research; ImmunoGen Inc.; Janssen Pharmaceutical Ltd.; Johnson & Johnson Ltd.; Merck Sharp & Dohme; Quintiles; Quest International; Sandoz; Seroba Kernel.



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## Fees and Scholarships

Tuition fee information is available on [www.ucd.ie/fees](http://www.ucd.ie/fees). Please note that UCD offer a number of postgraduate scholarships for fulltime, self-funding international students, holding an offer of a place on master's programmes. Please see [www.ucd.ie/international/scholarships](http://www.ucd.ie/international/scholarships) for further information.

## Facilities and Resources

Students on this programme will benefit from the use of a research skills laboratory in the prestigious UCD Conway Institute, as well as state-of-the-art teaching and laboratory facilities in the new O'Brien Centre for Science.

## Apply Now

This programme receives significant interest so please apply early online at [www.ucd.ie/apply](http://www.ucd.ie/apply)

## Entry Requirements

- This programme is intended for applicants who have an upper second class honours degree, or the international equivalent, in a biological or chemical science.
- This includes a BSc in Biotechnology, Biochemistry, Microbiology, Genetics, Neuroscience, Physiology, Pharmacology, Medicinal Chemistry or an equivalent qualification.
- Applicants whose first language is not English must also demonstrate English language proficiency of IELTS 6.5 (no band less than 6.0 in each element), or equivalent.

## Staff Profile

**Dr David O'Connell,**  
Lecturer in Biochemistry &  
Pharmacology



My core research focus is on the activity of calcium-binding proteins involved in homeostatic mechanisms in the cell using an integrated platform of proteomic technologies. I have patented a novel affinity tag platform for improved protein immobilisation for purification, biophysical analysis and detection in multiple biopharmaceutical applications and, together with Biopharma companies in the UK, Sweden and Switzerland, we are validating this technology in the industrial context and assessing the impact on the biotherapeutics discovery and development pipeline.

## EU Enquiries

Dr David O'Connell  
✉ : [biotech@ucd.ie](mailto:biotech@ucd.ie) ☎ : +353 1 716 6725  
[www.ucd.ie/courses/biotherapeutics-business](http://www.ucd.ie/courses/biotherapeutics-business)

## Non-EU Enquiries

✉ : [internationaladmissions@ucd.ie](mailto:internationaladmissions@ucd.ie)  
[www.ucd.ie/international](http://www.ucd.ie/international)

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