BECOME A NEXT GENERATION SCIENTIST

STUDY BSc IN ADVANCED THERAPEUTIC TECHNOLOGIES

Get career ready with RCSI's new Science Degree by fusing the latest scientific health discoveries with traditional science to develop advanced medicines and technologies from lab to market.

RCSI
UNIVERSITY OF MEDICINE AND HEALTH SCIENCES

RCSI.COM

RCSI UNIVERSITY OF MEDICINE AND HEALTH SCIENCES

DO YOU WANT TO BECOME A NEXT GENERATION SCIENTIST?

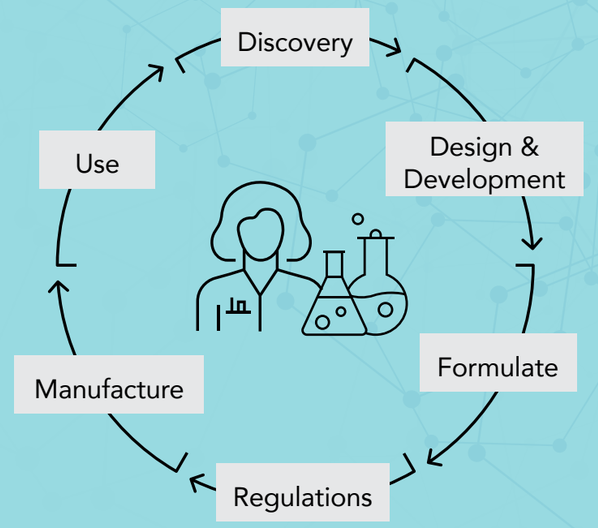
Do you love biology and health sciences, are interested in technology and would like to research and develop the latest medicines, treatments and health technologies? And as a highly sought-after graduate work in the thriving (bio) pharma industry in Ireland. If so, this is the course for you. RCSI has re-imagined university science education to develop the next generation of future scientists capable of innovating and collaborating to deliver ground-breaking therapeutic medicines and technologies to address current and future global healthcare needs.

The 3 key pillars of this science degree are:

1. **Gain extensive workplace relevant scientific knowledge in both traditional sciences and the latest advancements in medical therapies and technologies**
2. **'Learn and Do' with hands-on practical laboratory skills and data analysis including NIBRT training***
3. **Develop your power skills so you are workplace ready**

DRUG LIFECYCLE

BScATT focuses on the latest scientific discoveries, not only deep diving into each step of the drug life cycle, but also layering on advanced therapeutics and technologies



Connected Health | Computational Biology | Precision Medicine | AI & Machine Learning | Data Analytics | Stem cell and gene therapies

WHAT MAKES THIS SCIENCE DEGREE DIFFERENT?

Gain the **scientific knowledge** and skills to develop the latest medicines, **treatments and health technologies** from **lab to market**

Take a **"Big Data"** approach to interpret **Genetic and Genomic data** to develop new medical therapies

Complete an **8 month placement either in industry or research** and gain **critical power skills** to be **career ready**

9 KEY AREAS COVERED IN THIS SCIENCE DEGREE

Fundamental Sciences:
The science of how your body works -Physiology, Biochemistry, Chemistry and Anatomy.

Pharmacology:
The science of drugs and how they work in the body.

Precision Medicine:
Therapeutic treatments which are tailored to the individual -taking account of an individual's genes, environment and lifestyle.

Genetics & Genomlcs:
The role of genes in disease, patterns of inheritance, genetics for diagnosis and drug selection.

Pharmaceutics:
The science of drug delivery - ensuring medicines are delivered effectively to the correct body tissue.

BSc IN ADVANCED THERAPEUTIC TECHNOLOGIES

8 MONTH PLACEMENT

In semester 2 of Year 3 undertake a **8-month placement either in Industry or Research** where you will get to demonstrate, apply and further develop the technical knowledge, power skills and competencies in an **industry** or **research setting** and **build your professional network**.

IRELAND GLOBAL PHARMA HUB

Ireland is the world's third largest exporter of pharmaceuticals, with nine out of ten of the world's biggest pharmaceutical companies having substantial operations here. You will gain a clear understanding of the pharma end-to-end ecosystem and be ideally qualified for a number of exciting roles in the ever-growing (bio)pharma and related industries in Ireland and beyond.

BECOME A HIGHLY SOUGHT-AFTER GRADUATE

BScATT graduates are well qualified to apply for a range of exciting roles in the pharmaceutical industry and related sectors in areas such as Design and Management of Clinical Trials, Biomanufacturing, Data Analytics, Regulatory Affairs, Quality Assurance & Compliance, Scientific Research in Industry or Academia and Connected Health.

Immunology:
How the immune system works in health & disease. The immune system is an important target of new and emerging therapies.

Power Skills:
Critical personal skills in competencies such as leadership, management and communication which enable success in the workplace.

Computational Biology/ Data Analytlcs:
Statistical analysis and interpretation of big datasets generated from healthcare settings using programming Languages such as Python and statistical environments such as R.

Connected Health: Wearable devices. Artificial Intelligence (AI) and machine learning in the context of health e.g. blood sugar monitors linked to smartphone Apps to maximize effectiveness of diabetes treatments.

RCSI LEADING THE WORLD TO BETTER HEALTH

Ciara Murphy

BSc Advanced Therapeutic Technologies

I knew I wanted to do some sort of life science or pharmaceutical degree. I wanted to be able to obtain different skills other than those that are mainly lab based. That's the great thing about this course. You get to 'dip your toes' into everything; from fundamental sciences to data analytics to modules that improve your professional power skills. The industries you could go into after graduation are vast, from regulatory affairs, quality control and project management to data analytics, manufacturing and research & development, the opportunities are endless!

Jude Guia

BSc Advanced Therapeutic Technologies

"What separates this course from any another biomedical science courses is that it involves learning about the latest therapies and treatments for human health with the use of cutting-edge technologies and data analytics. The hands-on practical work in the labs allowed me to apply my knowledge from lectures, deepening my understanding and seeing the direct connection between the health science and real-world applications."

Stephen Kenny

BSc Advanced Therapeutic Technologies Alumni, Class of 2026

"I am currently working in Amgen, on a two-year graduate programme in manufacturing that consists of three eight-month rotations across different areas of manufacturing. I found that my eight-month placement in third year was a massive differentiator when it came to securing a role after graduation. I believe the workplace-relevant skills I gained over the four years—including manufacturing training and data analysis, as well as the constant focus on teamwork and problem-solving assignments—really helped me secure my new role."

BSc IN ADVANCED THERAPEUTIC TECHNOLOGIES

FURTHER INFORMATION

NFQ: Level 8

Award: BSc Advanced Therapeutic Technologies (Hons) (NUI & RCSI)

Awarding Body: National University of Ireland

Duration: 4 years

APPLICATIONS, FEES & SCHOLARSHIPS

» Irish/EU school leaver applicants should apply @ www.cao.ie

» All other applicants may apply through RCSI website.

» Non EU Fees: €25,000 per annum (€7,000 per annum bursary available for self-funded students)

ENTERPRISE COLLABORATION

This degree has been designed in collaboration with a strong consortium of national and multinational bio pharma companies who provided their expertise to support the development of the BScATT curriculum which addresses critical skill gaps and maximizes future BioPharma related opportunities.

All students receive dedicated training in biopharma manufacturing methods at the National Institute for Bioprocessing Research and Training (NIBRT)

BSCATT ON CAMPUS OPEN DAY 28 NOVEMBER 12PM

Join us in person on **Saturday 28 November** from **12pm** to learn more about RCSI's career ready science degree.

THE IRISH TIMES ARTICLE:

Scan this QR code to check out an article in The Irish Times about this exciting science degree.

FOR MORE INFORMATION PLEASE VISIT **WWW.RCSI.COM/ATT**
OR CONTACT US ON **admissions@rcsi.ie**

RCSI LEADING THE WORLD TO BETTER HEALTH