PhD Position in Carbohydrate and Medicinal Chemistry

School of Chemistry, Trinity College Dublin, Ireland

https://www.crawford-lab.eu/

Applications are invited for a fully funded PhD in carbohydrate and medicinal chemistry. The successful candidate will join the research group of Dr. Conor Crawford. You will use chemical synthesis and chemical biology to develop probes and inhibitors to study how sulfated glycans mediate symbiosis across marine and gut systems.

Project Description

Sulfated glycans are central to the interactions between hosts and microbes. However, enzymes that mediate these processes remain difficult to study. You will combine organic chemistry and chemical biology to:

- Synthesise defined oligosaccharides and chemical probes
- Develop small molecule inhibitors against carbohydrate-active enzymes

You will work in a rapidly expanding research area with opportunities to publish and collaborate internationally. You will be based in the Trinity College Dublin School of Chemistry in the Trinity Biomedical Sciences Institute (TBSI). You will join a young, growing, chemistry-led group, with close supervision in the early stages and increasing independence as the project develops.

Candidate Profile

The ideal candidate will:

- Hold a Bachelor's or Master's degree in organic chemistry, medicinal chemistry, chemical biology, or a related discipline
- Have experience and strong interest in carbohydrate chemistry, medicinal chemistry, organic synthesis, and/or chemical biology
- Demonstrate analytical skills and critical thinking in the laboratory
- Be curious, motivated, and enthusiastic about interdisciplinary research

Funding

This is a fully funded 4-year PhD position. This includes:

- Annual stipend: €25,000 (tax free)
- Annual student fee contribution: €5,750

Application Process

Please send:

1. CV
2. 1-page personal statement outlining why you are interested in this PhD project and why you are a strong candidate
3. Names and contact details of at least two referees
4. Transcripts of grades from BSc and/or MSc
5. Thesis (or drafts) from BSc and/or MSc

For full consideration, please apply by **28th February 2027** to Dr. Conor Crawford. Email: conor.crawford@tcd.ie

Please use the subject line: Application – PhD in Carbohydrate and Medicinal Chemistry

Applications will be reviewed on a rolling basis; early application is encouraged. Informal enquiries are welcome.

Start Date

March 2027 or September 2027 (flexibility for right candidate)

We are committed to fostering an inclusive environment. We strongly encourage candidates from underrepresented groups in STEM to apply.