

Biosciences

Lancaster  
University



# *Biology*



4<sup>th</sup>

The Guardian  
University Guide  
2022

# Welcome

Congratulations on being made an offer to study at Lancaster University. Lancaster is a highly-ranked university and as such, a degree from Lancaster is prestigious, and studying here is an exceptionally rewarding experience. Our Biology degree programmes are taught across two specialist departments: Lancaster Environment Centre, and the Division of Biomedical and Life Sciences. The expertise of our staff in these departments spans the full breadth of the biosciences, and this diverse suite of skills and knowledge makes Lancaster a really exciting environment to study Biology.

Our collaborative approach to both teaching and research ultimately provides you with a better student experience because:

- **The wide range of modules we teach provides you with choice and flexibility**
- **Our Enterprise and Business Partnerships team and our close collaborations and strong links with NHS and social care partners, health-related industries and the voluntary sector**
- **Students from all of our degrees form a close-knit community, allowing you to share your experiences, support each other and socialise together, not least on our wide range of fieldwork opportunities**

We understand that choosing a university course is not just about where you will study or live for the next three or four years. From the skills you learn, the aspirations you develop and the memories you make, your time at university has the potential to define the rest of your life. I would like you to be assured that we are here to support

you every step of the way to help you make informed decisions about your Higher Education options, succeed in your degree and to ensure that you are well prepared to enter a fulfilling and prosperous future career.

Please contact us if you have any queries about studying at Lancaster – our team are more than happy to help.

**Professor Martin McAinsh**  
Director, Undergraduate Biology



In his role of Director of Undergraduate Biology, Martin oversees the Biology degree programmes.

Martin is also an active researcher, focusing on plant cell biology. He has a particular interest in how plants respond to environmental changes, such as drought or ozone pollution, and how this relates to sustainable agriculture. As such, Martin teaches a number of undergraduate modules, including plant responses to environmental change, biochemistry, and cell biology.

# Meet the team

**Dr John Worthington**  
First Year Director of Studies

My research focuses on the role of interactions between our gut's endocrine and immune systems and how these can play a role in harmful inflammation. In particular, I am interested to understand the mechanistic crosstalk between enteroendocrine and immune cells in order to identify key features of intestinal health which could be therapeutically targeted during disease.



**Dr Ed Parkin**  
Study Abroad Academic Advisor

My research investigates the contribution of proteolysis and the enzymes that catalyse these processes in relation to diseases of aging such as neurodegeneration and cancer. In particular, I am interested in the role of the amyloid precursor protein (APP) in both Alzheimer's disease and cancer, and the role played by Notch signalling in prostate and colorectal cancers.

# Life as *a first year*

## *Finding your feet*

Your first week at Lancaster will probably be hectic, but you'll look back at it with very fond memories. You'll become best friends with people from all around the country, and even the world, as you get to know people in your accommodation and College at the numerous social activities throughout Welcome Week.

## *Discover your degree*

Throughout the year you'll be introduced to a wealth of new information and a new style of learning. This might sound daunting, but our degrees are carefully designed to develop your academic knowledge and practical skills. Besides, our excellent support system means you'll be supported every step of the way.

## *Get involved*

At Lancaster you'll have a choice of over 200 clubs and societies covering a range of activities, hobbies and causes. So whether you want to meet people who share your interests, to try something new, to explore a different culture or to increase your academic network, there is truly something for everyone!

## *Put theory into practice*

You'll be encouraged to take your learning outside of the lecture theatre. You'll have the opportunity to put theory into practice during lab practical sessions, explore the UK as part of our first year field excursions and even begin to conduct your own research.

## *Think about the future*

It's never too soon to start thinking about life after Lancaster. Whatever your career aspirations may be, or even if you don't know yet, we'll strive to support you and enhance your employability. You'll receive lifelong support from our careers team, which will put you in direct contact with graduate employers and recent alumni.



## Contact hours

Your first year at university is not only an opportunity to adapt to a new way of learning but also to explore a wide range of topics, helping you to choose the areas you want to specialise in from year two and beyond.

You'll be taught by internationally renowned experts in lectures and be able to put your knowledge into practice in numerous lab and field practical sessions but you will also benefit from a highly personal experience, learning and sharing your experiences with other students in small tutorial groups.

	Monday	Tuesday	Wednesday	Thursday	Friday
9am	Molecules of Life (lecture)	Molecules of Life (lecture)			
10am		Impacts of Microbes (lecture)		Evolution (lecture)	
11am	Skills in the Life Sciences (lecture)	Impacts of Microbes (lecture)		Evolution (lecture)	
12pm			Molecules of Life (lecture)	Impacts of Microbes (lecture)	Evolution (practical)
1pm		Evolution (lecture)			
2pm	Impacts of Microbes (workshop)				
3pm					
4pm		Skills in the Life Sciences (practical)		Molecules of Life (practical)	
5pm					

Total contact hours for the **Biology with Psychology** degree programme are very similar to the example above, with the addition of Psychology modules.

Contact hours can change week to week, and your first year timetable may differ. This timetable is for illustrative purposes only and does not guarantee the availability of any module.



# Why I loved Lancaster

*We caught up with recent graduate Jess Burrows to find out what she enjoyed most about studying at Lancaster and what tips she would give to those currently applying.*



## What did you enjoy most about your degree at Lancaster?

“When looking at courses I wasn't really sure what area of biology I was most interested in, therefore I really wanted a flexible course that allowed a lot of choice. After looking intensively at lots of universities I found that Lancaster was one of very few to offer such flexibility. I really liked how there was hardly any set modules and I could tailor the course to

my interests. I also liked that if you started modules and you realised that wasn't your interest, that staff were so willing to help you find modules that suited you much better. There was also such a wide range of modules available, which really made the decision easy.

I really enjoy the practical components of the course such as trips and lab sessions. I also really love how you can specialise in the area you are most interested in, for example I love ecology and conservation and have thoroughly enjoyed learning more about all of the different aspects. I have found that developing my practical skills has helped me to gain experience and I wouldn't have got that anywhere else. I also think the staff at Lancaster make the degree so much more enjoyable, they are honestly some of the friendliest people I have ever met and I have always been able to approach any member of staff with any problems I have had.”

## What advice would you give to anyone thinking of studying at Lancaster?

“I would say to not be worried about asking questions about the course and anything else you want to know, the staff are fantastic and always friendly. Looking back I wish I had asked more questions as I think it would have made the decision to come to Lancaster even easier. I would also say look carefully at courses and know that at Lancaster there are always options if you started your course and weren't sure. Look over modules for second and third years too so you know what routes you could take based on your interests.”



## Student support

Our departments are vibrant and friendly, fostering a highly supportive learning environment, ensuring that you receive the support you need in order to achieve your full academic potential.

You will benefit from being able to study in small groups at various points in your degree. This is not only a great way to work closely with others on your course, but also to receive personal academic support from the teaching staff. We also give timely feedback on the coursework you submit throughout the year, enabling you to note areas for improvement and act upon this.

We recognise that adapting to a different style of learning may sound daunting, but you will receive excellent support and guidance from a number of sources. Our academic staff also operate an 'open door' policy and are more than happy to informally discuss your work with you.

### Academic Tutor

You will be assigned an Academic Tutor for the duration of your studies. You will both meet at least once per term, which provides an excellent opportunity for one-to-one discussion about your progress.

### Learning Developers

You will have access to our Student Learning Developers, who offer free consultations to help you improve your scientific writing, plan assignments and revise for exams – all of which ensures you are able to achieve your full potential.

“Don't worry about any questions you may have about starting university. If you choose to study at Lancaster, we'll match you up with a Student Mentor, who will guide you through your initial first few weeks of university, helping to answer any queries or concerns that you think are trivial. They know what you are experiencing, know the best people to ask, and help give you a great start to life at university.”

**Julia Bland**, first year  
Teaching Coordinator

# Travelling the world *thanks to Lancaster*

*Recent graduate Jenny Mitchell used a University scholarship to fund a volunteering trip to South Africa, where she lived amongst and helped protect endangered animals.*



“ After the hard work I threw into my A level studies, I wanted to get as much as I could out of the results. So when the Academic Excellence Scholarship (offered to Lancaster University unconditional offer holders) finally arrived, my options were clear. I could spend it on shoes, books and food, or put the £3000 to good use spending a month living among and protecting South Africa’s endangered animals. Not a difficult choice really!

From the day we reached the reserve, I quickly discovered just how much effort Monitors put into the conservation of these animals 365 days a year. At each of the two reserves where I worked, five volunteers sat atop a jeep, using tracking equipment to follow animals via their radio collars across thousands of hectares a day. The professional Monitors were brilliant, training us quickly on interpreting radio

signals, minimising human interference on animals that crossed our path, entering data from each day, setting camera traps and, most importantly, surviving the horrendously early mornings.

I returned home resolved to annoy all my friends and family by encouraging everyone I could, as often as I could, to go and volunteer yourself! I guarantee you, there is no greater joy and satisfaction than doing something where you know with absolute certainty that what you are doing is making a notable difference to a deserving cause. If you achieve those dreamed-of top grades (you will if you put your mind to it) and you get to reap the deserved rewards, celebrate by putting those rewards to good use! Why fritter away a scholarship on day-to-day spends, when this time next summer you too could be sitting watching sunrise beside your pick of the world’s rarest species.”

## Scholarships and bursaries

Our priority is to support you to make the most of your life and education. We have a package of bursaries, based on household income, and scholarships, based upon academic performance at A level (or equivalent academic qualifications), to help support you during your time at Lancaster.

For up to date details of tuition fees, financial support and further guidance please visit our website: [www.lancaster.ac.uk/scholarships](http://www.lancaster.ac.uk/scholarships)



# Preparing for the future

Working closely with major graduate employers and global businesses, our Careers Service is here to help you develop key skills, gain relevant work experience, network with employers and alumni, and take your first vital steps into the world of work. We're good at it too, we are **joint 8th** for careers in Biosciences (The Guardian League Tables 2022).

## The opportunities we offer include:

- **Careers Fairs** attracting 100+ employers
- **Sector-specific events, workshops and employer networking**
- **Career-mentoring programme, allowing you to learn from an employer or alumni mentor**
- **Communications about graduate schemes, internships and work experience opportunities**
- **On-campus recruitment agency, offering part-time roles for students**
- **Lancaster Award programme to recognise work experience, extra-curricular activities and transferable skills**

## Work experience

Relevant work experience is crucial to achieving a good graduate job and our in-house Enterprise and Business Partnerships team and our close collaborations and strong links with NHS and social care partners, health-related industries and the voluntary sector, providing many opportunities for work experience or internships.

## Lasting support

We provide you with lifetime access to our Careers Service. Most of our graduates go straight into work or stay in academia for postgraduate study, but careers aren't always straight lines along one simple track. We know that individual aims and circumstances can change over time, so we'll always be here to help.

“In order to achieve a good graduate job and kick-start your career, it is important you have relevant experience that you can draw upon in an application and interview. We engage with hundreds of different businesses and organisations, giving you the opportunity to undertake an internship or work experience placement alongside your degree.”

**Dr Ruth Alcock**, Head of Enterprise and Business Partnerships

# Work placements: *where could one take you?*

*Undertaking an internship is a great way to gain work experience and a valuable addition to your CV. Recent graduate Shannon Galgani, completed a 10-week internship with MAC Clinical Research in the Manchester Early Phase Unit and explains how she had the opportunity to put her knowledge into practice.*



“Through Lancaster University I secured a 10 week internship with MAC Clinical Research in the Manchester Early Phase Unit. As a clinical trial intern I was lucky enough to work with research nurses, doctors and study co-ordinators who taught me how to perform screens, telemetry, ECGs, vital signs, spirometry, venepuncture and even Intermediate Life Support training! All these skills were then used to monitor participants as they went through a clinical trial for a drug that would hopefully bring a better treatment or quality of life for people with certain conditions!

It was a really exciting place to work as at any given time there were multiple studies being conducted, meaning that there was always a new condition, drug or screening technique to learn. Taking skill-based laboratory modules such as the second year module 'Biochemical Techniques' at Lancaster meant that I was comfortable preparing blood and urine samples in the MAC laboratory, and my 'Practical Physiology' knowledge helped me understand the physiological basis of performing ECG measurements.

I enjoyed every second of my internship and was lucky enough to be given a locum contract with MAC Clinical Research after the internship finished - Lancaster University's connection with this company meant that I was able to gain experience in my dream field before I had even graduated!”

## Contact us

If you have any further questions, please do not hesitate to get in contact with us  
Web: [www.lancaster.ac.uk/biology](http://www.lancaster.ac.uk/biology)  
Email: [bioladmit@lancaster.ac.uk](mailto:bioladmit@lancaster.ac.uk)  
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## Connect with us

Twitter: [@BLSLancasterUni](https://twitter.com/BLSLancasterUni)  
Instagram: [@LancasterUniFHM](https://www.instagram.com/LancasterUniFHM)



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### Offer holder events

The University is planning a full calendar of in-person, and remote, Offer holder events. These are scheduled from the end of this calendar year, through the end of April 2022. However, it may be the case that circumstances require us to move all these events online, and while we sincerely hope that does not happen, we must plan for that eventuality. We will be in touch directly with dates and times, and will keep you updated should we need to change their timing or mode of delivery. You can keep up to date with all Covid-related news here: [www.lancaster.ac.uk/coronavirus](http://www.lancaster.ac.uk/coronavirus)

**Disclaimer:** The information in this leaflet relates primarily to 2022/23 entry to the University and every effort has been taken to ensure the information is correct at the time of printing in November 2021. The University will use all reasonable effort to deliver the course as described but the University reserves the right to make changes after going to print. You are advised to consult our website at [www.lancaster.ac.uk/study](http://www.lancaster.ac.uk/study) for up-to-date information.

Further legal information may be found at [www.lancaster.ac.uk/compliance/legalnotice](http://www.lancaster.ac.uk/compliance/legalnotice)