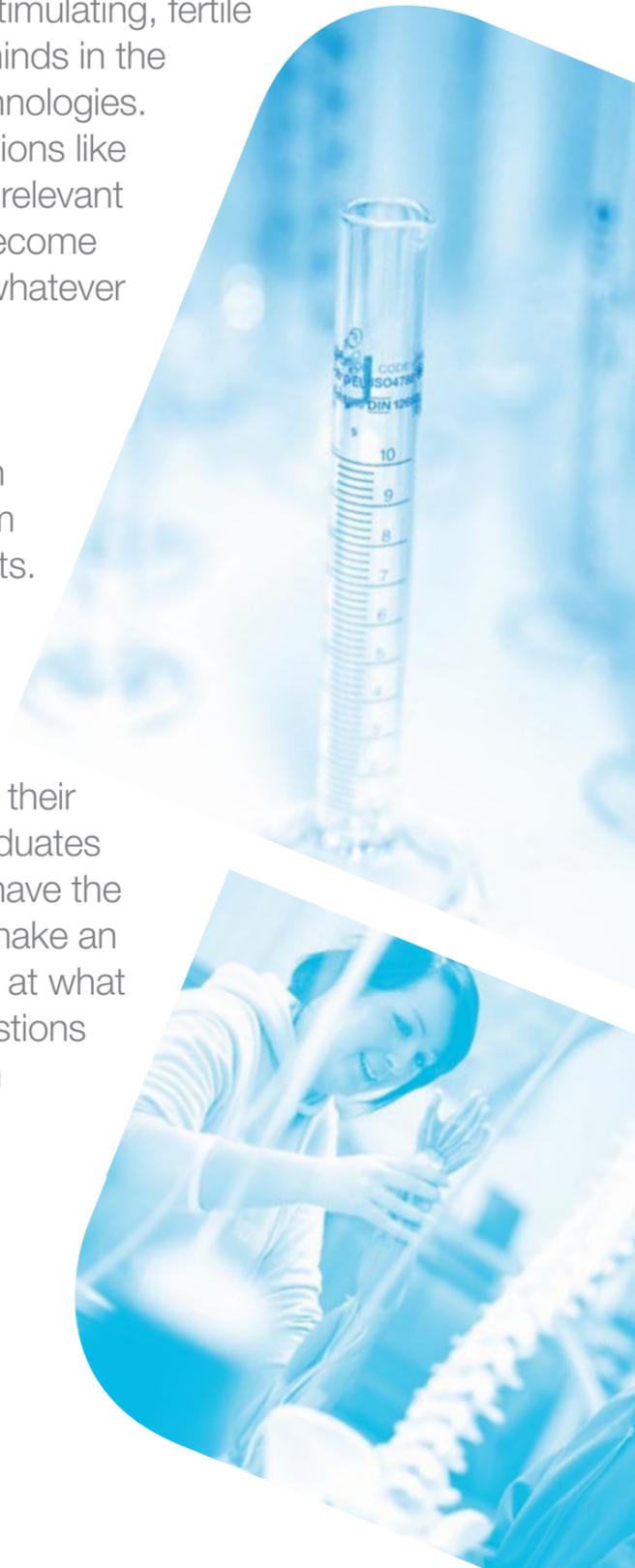


Welcome to an *enterprising* university

At the University of Hertfordshire, we believe what we do makes a real, positive difference to local, regional, national and international businesses and organisations. We are proud to have fostered a stimulating, fertile culture for some of the brightest minds in the UK to develop their ideas and technologies. We also make it easy for organisations like yours to access that research in a relevant and affordable way, helping you become more productive and profitable – whatever the economic climate.

With easily accessible expert consultancy and contract research we can fully support short, medium and long-term collaborative projects. We also provide an extensive workforce resource to employers in the form of 'ready-to-go' students who actively participate in live case study examples during their studies. This means when our graduates and interns join you, they already have the knowledge and practical skills to make an immediate impact. So, take a look at what we offer and if you've got any questions about how we can help, just get in touch. We're here to help.



The School of Life Sciences: your partner for *better* business

One of the fastest growing universities in the UK, the University of Hertfordshire has a proven track record when it comes to helping organisations large and small at a local, national and international level.

The School of Life Sciences focuses on some of life sciences' most exciting and rapidly evolving disciplines - biosciences, sport science, sports management, sports therapy, human geography, and environmental sciences - where up-to-the-minute knowledge and practical skills are essential.

The School has an acute commercial awareness that benefits both course content and the quality of our teaching. Active in research, consultancy and training and with strong links to education and commerce worldwide, we deliver career-relevant programmes in all three areas.

We often say we're the leading business-facing university, and that's because we understand that everything we do here is geared towards improving organisations like yours – whether that's through offering flexible training, real-world consultancy, applicable research or work-ready, highly trained graduates.

With around 84 members of staff, the School of Life Sciences has experts in the areas of Bioscience, Sport Sciences and Environmental Sciences – all ready to work with you, understand your needs and make a measurable difference to your organisation.

Our School is based on the University's College Lane Campus, which features extensive computing and informatics resources complemented by several well-equipped specialist laboratories, staffed by experts. Everything's at your disposal and we invite you to see for yourself just how easy it is to access whatever you need to improve your people and your performance.

Our team is ready to help you make the first step, so why not find out what we can do for you? Drop us an email at be@herts.ac.uk, call **+44 (0)1707 286406** or visit www.herts.ac.uk/ls to find out more. We look forward to working with you.

Our key strengths

- Track record in delivering Life Sciences short courses
- Bespoke training
- Breadth of practical expertise
- New laboratories in human physiology, pharmacology, biochemistry and chemistry
- Dedicated field station for geography and environmental projects
- Professional body accreditations from BASES, IEMA, CIWEM, IBMS and the Society of Sports Therapists

Tap into our consultancy and research *expertise*

With experts offering consultancy and short courses in the areas related to Biosciences, Geography and Environmental Sciences and applied Sports Science and Health, the School of Life Sciences gives your organisation easy access to practical advice informed by respected research.

Biosciences

Bidetet and the Science Training Centre (STC) offer a wide range of consultancy and training in the areas of:

- Microbiological testing and analysis
- Pharmaceuticals and drug delivery
- Cell culture and cell analysis
- Biosensing technologies
- Systems physiology
- Biostatistical analysis
- Enzyme and protein techniques
- Technologies
- Molecular and genetic analysis
- Immunoassay and Immunodetection

We are able to run intensive training in laboratory techniques either at your organisation's own laboratories or at our University's specialist laboratory facilities. Get in touch with us to find out how we can help your organisation.

In addition, we run update courses for professionals in the form of evening lectures which are held at our College Lane Campus. These evening lectures are an ideal opportunity if your organisation is based locally and you have staff that want to attend courses from introductory to advanced level. They normally run between 3-9 weeks and you need to be able to travel to Hatfield for a 6.00pm start.

Case study

Bidetet tests gadget that kills germs on the keyboards

Bidetet tested at the University's laboratories the Germ Ginie, a gadget that kills 99 per cent of germs including E.Coli, Staphylococcus, Aerus and Bacillus Subtillis. The gadget was developed by Falcon Innovations and is aimed at those who have a lot of different people uses on one keyboard. It uses a UV light to sanitize the area and unlike other solutions it will sanitize the keyboard many times a day after each use, preventing this way the passing on of infections like flu, MRSA and E.Coli.



I always found the consultancy team at the University very responsive to working with a start-up business. They understood the need to collaborate to build a project over time and were able to add value to our business from day one of the relationship.

James Louttit,
Falcon Innovations

Geography and Environmental Sciences

We offer a wide range of consultancy in geography and environmental sciences (GES), including areas such as environmental management, sustainability policy, remote sensing, Geographic Information Systems (GIS), transport and travel planning and environmental monitoring.

In recent years, our School's GES consultancy has delivered projects to organisations ranging from government agencies to charities, public bodies to multinationals to name a few.

We needed to review, critically appraise and gain recommendations about how to enhance our approach to Strategic Environmental Assessment and of the resulting Environmental Report produced for our Draft Water Resource Management Plan. The University's consultancy has created for us a discreet, knowledgeable and insightful report regarding the SEA process and provided a useful framework on which to improve our approach to SEA in the future.

John Ellis, TWV Strategic Studies Manager,
Veolia Water PLC

Case study

St Francis Hospice

The hospice group approached us looking for a spatial analysis of their existing estate, with the aim of identifying sites for new shops. We were able to analyse the current locations and, using demographic information such as population density and employment levels, we were able to ascertain suitable possible new locations. These were then studied and the results displayed on a clear, understandable and easily interpretable map.

St Francis Hospice says: "Dealing with the GIS team was refreshingly straightforward and we would gladly work with them again. The work produced has been of great use to us. The end result satisfied our project brief and gave us a clear visual explanation of the data. Not only was it of a professional standard, but it also provided useful insights into our existing estate and untapped potential in our coverage area."

Sport Sciences

We offer a range of consultancy services in all areas of applied Sports Science and Health including:

- Cardiovascular testing
- Lactate testing
- Weight management
- Sports injuries
- Sports psychology support
- Sports nutrition and heat acclimation.

Our strength lies in our excellent facilities which allow us carry out these tests including an environmental chamber.

The team was knowledgeable on what they were doing and treated the athletes with the required respect and professionalism throughout the process. It has helped us tweak the athletes nutrition plan which hopefully will form a strong ingredient in their future success.

Raphael Deinhart,
High5

Case study

High5

High5, an advanced sports nutrition company, approached the sports consultancy team at the University to help them with their testing of some of the world's top ironman athletes so that they could develop an optimal nutrition strategy for their races. Dr Justin Roberts and his team were involved in designing the protocol, testing the athletes in the lab and analysing the results. Their work helped High5 modify the athletes' nutrition plan which will enable them to achieve better results and records.

Short Courses

We realise that not everyone has the time – or desire – to commit to a training course, no matter how flexible. That's why we run a series of short courses that can be completed within a day or two.

They're open to everyone and take place throughout the year. We can even set up a tailored short course on a subject that suits you. Our short courses cover areas such as:

Biosciences

- Molecular biology and nucleic acid techniques
- Protein and proteomic analysis
- Immunology and Immunoassay
- QPCR techniques and bioinformatics
- L8 training for facilities management

Geography and Environment

- Corporate social responsibility
- Environmental management systems implementation
- Transport and organisational travel plans
- Geographic information systems (GIS)
- Energy management
- Environmental research methods

Sports Science

- Injury rehabilitation courses
- First aid training courses

Contact us on **01707 286406** to find out more about our courses or visit go.herts.ac.uk/ls

Tailored programmes

If you want your people to receive a short burst of training on a particular subject, we can create a range of customised courses. Combining academic rigour and applied business understanding, these courses will meet the demands of your business exactly.

Get in touch to find out more by emailing be@herts.ac.uk

Research

The School of Life Sciences houses a number of expert research units in:

- Agriculture and environment research (AERU)
- Biotechnology and molecular biology
- Geography and environmental sciences
- Pharmacology
- Sport, health and exercise

Get in touch to see where your organisation needs could be met by our expertise.

Case study

Stem cell research

Myocardial infarction has remained one of the most frequent causes of death in the western world. Although progress is being made in reducing mortality with conventional therapies, there is still no cure for the damaged myocardium other than heart transplant. The alternative to heart transplant is restoring normal cardiac function through tissue regeneration using transplanted stem cells. This novel approach is however restricted by the poor survival of stem cells. The research team at the University is currently investigating the cellular mechanisms that promote survival and stem cell differentiation into cardiomyocytes to enable future successful restoration of the cardiac function without the need for a heart transplant.

Case study

The impact of introducing environmental labelling of food

The Food Ethics Council and the Policy Studies Institute is currently working with the Agricultural and Environmental Research Unit (AERU) in order to explore the practicality and effectiveness of environmental labelling of food. They are looking at how the new labelling will act as a mechanism to promote behavioural change in order to reduce the negative environmental impacts of food production and consumption. The outcomes of the research will be valuable to food producers and exporters as it compares the pros and cons of different labelling formats and investigates the potential burden and in particular the costs of introducing such a label.

World-class facilities and resources

- Biosciences research facilities cover fermentation biotechnology, high performance liquid chromatography (HPLC), cell culture, molecular biology and pharmacology
- Four dedicated laboratories for geographical and environmental science. They house field study materials and aerial photography, IT and research resources for geographical information systems (GIS) and remote sensing, equipment for testing sediments, petrological microscopes, geological maps, and a rock and fossil collection
- Sports facilities that comprise of six purpose-built laboratories and a therapy room with an adjacent sports injuries clinic. State-of-the-art sport, exercise and therapy equipment is located here, including systems for analysis and electrotherapy. Our large environmental chamber, with a temperature range of -20 to +40 degrees Celsius, is used by national teams to help with heat acclimation
- Bayfordbury Field Station which is situated in the Lee valley just outside of Hertford and comprises a science block, plant growth facilities, an Environmental Agency funded stream research facility and 50 types of habitats, including ancient woodlands, grassland and a lake.

The ideal location

Within easy reach of London, the South East and even further afield, the School of Life Sciences is based on the University's College Lane Campus. Thoroughly modern with an incredible range of teaching and research facilities, the University is a welcoming, accessible place for organisations of all sizes.

Get in touch

Whether you're looking for training, advice or access to facilities, we're ready to help. To find out more about the benefits of working with the University of Hertfordshire's School of Life Sciences, please contact us on +44 (0)1707 286406, email be@herts.ac.uk or visit go.herts.ac.uk/ls