By coupling groundbreaking research with its thriving business centre, Cardiff Metropolitan University takes a focused and dynamic approach to expanding and developing the commercial, social and environmental value of its work.

A FORWARD-THINKING UNIVERSITY

Located in Wales’ thriving capital city, Cardiff Metropolitan University (Cardiff Met) is a progressive and innovative institution with a global reach. Initially founded in 1865 as a School of Art, the institution has had a long and varied history, positively impacting the lives of its many trainees throughout the decades. Granted University College status in 1996, its primary focus today remains on providing excellent and accessible education and training opportunities for its students. The University is dedicated to the promotion of applied research and knowledge transfer, which in turn contributes to the economic, social and cultural prosperity of Cardiff, southeast Wales and beyond.

Cardiff Met spreads its research across a range of disciplines. At the core of the University are five academic schools: Art and Design, Education, Health Sciences, Management and Sport. Each of these units specialise in delivering courses with strong vocational value, which have been designed to work in conjunction with industry. Importantly, Cardiff Met has a global reputation, with its robust partnerships extending to world-renowned organisations such as Ford (UK), Robert Bosch and the Food Standards Agency. In each of the University’s academic schools and centres, the staff and students have an outward-looking focus, with a priority to ensure that their research will eventually have a recognisable impact on industry and society. This close connection between research and modern-day applications firmly positions Cardiff Met as a progressive university that fosters bright prospects for its current and future students.

CARDIFF MET IN NUMBERS

Over 450 consultancy contracts were secured worth more than £1.5 million

19,000 learner days of Continuing Professional Development and Continuing Education courses were delivered

Designated public events such as public lectures, performance arts and exhibitions amassed in excess of 10,000 attendees

Regeneration and development programmes generated an income of over £850,000

Over 40 graduate start-ups were established

(information from 2012/13 Higher Education – Business and Community Interaction Survey data return)
NEW CENTRE FOR BIOMEDICAL RESEARCH INSPIRES INNOVATIVE THINKERS

In the School of Health Sciences at Cardiff Met, £4.2 million has recently been spent on launching a new Centre for Biomedical Research, as well as improved food safety and nutrition research facilities. Investment in these premises has bolstered a wealth of budding research projects on the cellular and molecular mechanisms of human diseases, along with studies on their prevention and associated therapies. The Centre hosts a range of laboratories that specialise in cellular senescence and vascular biology – and, excitingly, the implications of this applied research extend much further than the confines of a Petri dish.

An ageing society

Work within this unit includes a collaborative project with academics from University College London, UK, and the University of California, USA, on the influence of lifestyle and psychosocial factors on the biomarkers of ageing. The hope is that this research will lead to the clearer identification of factors that promote healthier ageing, thus improving the design of governmental interventions and public health policies, and helping to mitigate the negative consequences of an ageing society.

The dangers of industrial work

The immunology department in the Centre for Biomedical Research has generated funding from industry to examine the potential respiratory health risks caused by industrial methods such as waste processing and metal-working. Here, the main focus is on analysing the effect of worker exposure to bioaerosols from commercial composting. The researchers in this Centre have established collaborations with Cardiff Met’s Centre for Health, Safety and Environment, with the aim of ensuring that their applied research is used to help reduce occupational health hazards for industrial workers and to guide health legislation to improve future working conditions.

Reducing disease transmission in hospitals

Alongside these major biomedical research departments is a Microbiology and Infection Unit, which is currently working with the Food and Consultancy group to investigate the role of hospital environmental surfaces in the transmission of infective agents. The aim of this Unit is to develop more effective management and cleaning practices, leading to the prevention of disease transmission to patients in hospitals. Much of the Unit’s work is conducted in collaboration with commercial organisations and involves evaluating new products and formulations.

LINKS WITH INDUSTRY STIMULATE ECONOMIC GROWTH

A large body of work at Cardiff Met is conducted under the roof of the University’s National Centre for Product Design and Development Research (PDR). Initially launched in 1994, PDR has since forged a global reputation from the knowledge it has developed and applied in the field of product design. It places the needs of individuals and the wider community at the centre of its research activities, using an industry-focused approach to enable large and small businesses across the world to design and develop successful products and services.

Students at PDR benefit from working in collaboration with manufacturing companies – especially SMEs – as well as government bodies, hospital trusts and charities. Bringing together original applied research and consultancy services to advance the process of product design, development and manufacture, PDR also takes part in Knowledge Transfer Partnerships. Supported by government funding, these projects involve the placement of a recently qualified graduate within a company, in order to provide the company with specialist knowledge and expertise. As a proven formula that has brought success to internationally renowned firms such as Bosch and Sony, these Knowledge Transfer Partnerships are estimated to bring large economic paybacks to the company.

APPLYING ART AND DESIGN

Cardiff Met’s Centre for Applied Research in Art and Design (CARIAD) plays host to a multidisciplinary group of researchers, lecturers and students. Bearing the strapline ‘putting people at the heart of research’, CARIAD applies its activities to identifying solutions to the various challenges faced by vulnerable individuals and diverse communities. As the University’s first and only pan research Centre, CARIAD has made significant contributions to society to date, using its evidence-based research to influence government policies.

For example, CARIAD’s project ‘Somantics’ uses motion technology to convert movement and gestures into a digital performance, with the aim of helping young people with Autism Spectrum Conditions (ASC) improve communication and expression. Another CARIAD-led project is ‘IMAGINE’, which explores different ways of making the hospital environment more welcoming and relaxing for younger patients, with the goal of improving the recovery rates in children’s wards.
As a University that is committed to the development of its staff, between 2008 and 2011 Cardiff Met successfully participated in a pilot programme of Strategic Insight Placements (SIPs). Through allowing staff to work in external organisations, these fully funded short-term placements provide illuminating insights and fresh perspectives, encourage collaborations and help to stimulate research innovation. Supported by over £250,000 of funding from the Higher Education Funding Council for Wales, SIPs were initially a joint project between Cardiff Met, the University of South Wales and the Royal Welsh College of Music and Drama. Since the programme expanded across Wales in 2012, Cardiff Met has secured over 100 placements. With organisations such as the BBC, Royal Mint and Cricket Wales taking part in the project, the placements have helped the University to extend its profile in industry.

As one of the UK’s leading Schools of Sport – and firmly anchored in the top 10 post-1992 list – Cardiff Met offers state-of-the-art sports facilities and an extensive range of sporting activities that meet the needs of students, elite athletes and the wider community. Building on a 60-year history, the School has forged an international reputation for excellence in its academic and professional work. Indeed, Sport is the most prestigious part of the University – and the School plays host to some of the most diverse and contemporary sports courses in Britain. Its undergraduate and postgraduate degree courses have been designed to address individual student interests, with a strong emphasis on vocational skills in the respective fields of sport, dance and health. Specialist sport science laboratories at the School include the Performance Analysis Lab, Physiology Lab, Biomechanics Lab and Physiology Research Lab.

Looking ahead, Cardiff Met is planning to cement its position as a thriving centre of excellence in research and, ultimately, to achieve a place in the top 10 post-1992 universities. At the same time, strong emphasis will continue to be placed on vocational skills and employability, with the ongoing refinement of its career-orientated courses across all five Academic Schools. The University will further expand its connections with business and industry, ensuring the perpetuation of practical work placement programmes and professional accreditations. Furthermore, as the institution develops and thrives, more time and money will be devoted to communicating the success of its research through multi-channel dissemination. Bolstered by its focus on multidisciplinary research, academic collaborations and strategic partnerships with industry, Cardiff Met is on track to become one of the UK’s leading institutions for innovation and progressive thinking.

Dr Caroline Limbert, Senior Lecturer and Programme Director of MSc Health Psychology at Cardiff Met, took part in an SIP in which she worked with Vale Eating Disorders Service, a community-based outpatient service for people with eating disorders. Promisingly, this partnership resulted in the development of numerous research ideas and the University has since joined an eating disorder research group that is seeking to reduce the stigma that surrounds mental illness in society, as well as encouraging further research in this area.