Founded on innovation & excellence
Stirling is a world-class University – ranked as one of the world’s Top 50 Universities under 50 years old* – with a research reputation for innovation and excellence. Our exciting and ground-breaking research in the fields of health and wellbeing, the environment and people, culture and society, enterprise and the economy, and sport, impacts the lives of people and places around the globe.

We recognise that PhD researchers are an invaluable part of academic life and they are integral to our academic community, generating new knowledge and ideas to meet the needs of a global society.

Across all of our research areas and themes, highly motivated and dedicated researchers are driving forward their research areas and making their mark on academia, policy, people and places.

PhD students are the future of their disciplines, integral to our ability to perform research that delivers substantial impact on, and contribution to, the economy, society, public services and cultural life in Scotland, the rest of the UK and internationally. Our thriving academic community is made up of Scottish, UK and international students pursuing not only traditional PhDs, but also professional doctorates, PhDs by practice and PhDs by publication, on either a full- or part-time basis.

The following case studies will give you a flavour of our research – world-leading researchers excelling in their field of expertise.

To find out more visit:

➲ www.stir.ac.uk/postgraduate/research-degrees

*The Times Higher Education 100 Under 50 rankings
Stirling is a world-class University – ranked as one of the world’s Top 50 Universities under 50 years old.
PhD study is a major undertaking, requiring intellectual curiosity, skill and commitment. It is unlike any previous degree experience. You will need a supportive, challenging, exciting and welcoming research environment, both at institutional and supervisory level. At Stirling we believe we have the right environment to meet the needs of our PhD researchers.

PhD students at Stirling work with leading academics who provide advice, guidance, direction and support, ensuring students fulfil their potential. They do this in a geographical and campus location which is second to none, with access to excellent research facilities – both on site and via our national and international collaborations.

The Stirling Graduate School (SGS) is the virtual hub for our postgraduate community and is pivotal in providing both intellectual and social contact amongst graduates of different disciplines, backgrounds and countries. We are here to help you to make rewarding contacts outside the close confines of the laboratory or the library, whether within the University of Stirling or the wider world.

Our Skills Development Programme provides the generic skills required to complete a PhD successfully and for employment in future academic and non-academic settings. By supporting you to make the most of your research and development opportunities the Stirling Graduate School will ensure you feel part of Stirling’s vibrant and growing postgraduate community.

University support services will provide accommodation advice, learning support, personal advice and help, career support and other specialist services during your PhD programme.

Stirling offers something unique in terms of our approach to PhD study. Our academic research culture, student support and campus provide the perfect ingredients to ensure that you can realise your postgraduate ambition.

Leigh Sparks
Head of the Stirling Graduate School and Professor of Retail Studies

www.stir.ac.uk/graduateschool
**Bumblebee conservation**

Professor Dave Goulson’s research group has spent the past 18 years conducting research on the ecology and conservation of bumblebees, and has produced more than 190 peer-reviewed publications in this time.

The group’s research has focused on explaining why many species are declining and developing techniques to conserve them. They have discovered much about the population structure, foraging range and dietary requirements of both rare and common bumblebees. Their molecular studies have revealed the impacts of inbreeding on bumblebees and allowed estimation of minimum viable population sizes.

In combination with studies of bumblebees conducted elsewhere, we now have a clear idea about how to conserve bumblebees; they simply need enough of the right flowers, at the right times of year, provided in patches distributed at an appropriate spatial scale. This action needs to be integrated with farming practices to produce a sustainable system whereby pollination services for crops and wildflowers are secured.

Much of the research into how best to conserve declining species is never translated into action.

The Bumblebee Conservation Trust was founded by Professor Goulson to translate conservation research into action. The aim of the Trust is to conserve bumblebees by: raising public awareness of bumblebee conservation issues; involving the public in practical conservation and recording schemes; promoting wildlife-friendly gardening; influencing policy relating to agri-environment schemes; and to join with other NGOs to create habitat for bumblebees.

Steph O’Connor is undertaking research towards her PhD and is interested in bumblebee nest predation. Steph has used a sniffer dog (Toby) to search for the nests of common bumblebee species. As part of the research they found 19 bumblebee nests and Steph filmed the entrances to investigate nest predations. Animals found to be preying on bumblebees coming in and out of the nests included great tits, robins and crows, while shrews and voles were also spotted visiting the nests (although what they did inside the nest remains a mystery). Hedgehogs and squirrels were also found to show some interest in the nests. The observed nests were large enough to recover from the predation. The study focused on the most common species of bumblebee, but the question remains as to how nest predation affects our less common species.
Two UK bumblebee species have become extinct in the last 80 years and others have declined dramatically.

Bumblebee Conservation Trust
“In the final year of my PhD, I applied for and secured an International Olympic Committee’s PhD research grant, which I could not have achieved without the support I received at Stirling.”

Dr Sunghee Park – Korean national women’s tennis team (from 1990 to 2000)
Dr Sunghee Park, who graduated in June 2012, worked under the supervision of Professor David Lavallee to examine the transitions high performance athletes make to other careers after they retire from their sport. The intensity of training and commitment that athletes make to achieve success can have negative consequences.

The research found that high-level sporting competition plays an important role in developing transferable skills, such as communication and time management, but that athletes who focus exclusively on their sport can become role restricted and be more at risk of finding it difficult to change career. Athletes who are better prepared for life after sport are able to balance their education and career development alongside training and competition.

The key variables related to the quality of athletes’ career transitions are now used to train practitioners who are providing proactive (for example, career planning, providing education of transferable skills) and reactive (for example, coping with emotions, supporting identity reformation process) support programmes to athletes to help them prepare for their career transition out of sport and adjust to post-sport life.

Research at the University of Stirling has underpinned the development of interventions by the Irish Institute of Sport for athletes retiring from their sport. This led to the design of a multi-dimensional support intervention that contains a series of proactive and reactive support processes that are aligned with critical support stages before, during, and after the Olympic and Paralympic Games.

The research has also informed the establishment of the first ever defined post-Games athlete support programme involving a series of diverse supports, including post-event debriefing led by a dedicated team of psychologists, in order to effectively support athletes retiring from sport.

The research has featured in reports highlighting research with impact and also as part of a project informing the public about research on sport psychology.

www.bps.org.uk-going-for-gold
The University’s Institute for Social Marketing (ISM), led by Professors Gerard Hastings and Linda Bauld has monitored the nature, extent and effects of tobacco marketing in the UK for more than two decades.

Key studies include the Youth Tobacco Policy Survey, funded by Cancer Research UK, and research for the Department of Health. As legislation prohibiting tobacco advertising has been implemented in the UK and other countries, the tobacco industry has responded by directing their marketing budgets towards remaining forms of promotion – most recently tobacco packaging.

ISM researchers, including Crawford Moodie and PhD student Allison Ford, have conducted a series of studies on the use of tobacco packaging as a marketing tool. They have focused on how this strategy affects young people’s packaging awareness and preferences, as well as their perceptions of innovation image and value of packaging.

Allison’s and her colleagues’ findings, published in a recent report for Cancer Research UK, have shown packaging is viewed as a key marketing tool for tobacco companies, and that packaging has a wider reach than advertising and is the most explicit link between the company and the consumer.

Plain packaging was perceived by young people as unattractive; it reduced emotional attachment to the packaging and reinforced negative smoking attitudes.

These findings were echoed in a systematic review of the impact of plain packaging commissioned by the Department of Health through the Public Health Research Consortium, which formed the basis of the UK-wide public consultation on proposed plain packaging legislation (April-August 2012). This review is a good example of the type of research ISM conducts regularly for government and other organisations in order to inform the design and delivery of services and policies to prevent smoking uptake and promote smoking cessation.

The Centre for Tobacco Control Studies is core-funded by Cancer Research UK. Allison is also a member of the UK Centre for Tobacco Control Studies (UKCTCS). Funding to UKCTCS comes from the British Heart Foundation, Cancer Research UK, the Economic and Social Research Council, the Medical Research Council and the National Institute of Health Research, under the auspices of the UK Clinical Research Collaboration.

Tobacco: the power of packaging
"My interests lie in public health policy and undertaking a PhD at Stirling has allowed me to follow my own path, to add to the evidence base informing policy development and to learn new skills along the way. Stirling Graduate School’s Skills Development Programme provides excellent training opportunities covering everything from working with your supervisor and statistics to writing and career planning."

Allison Ford, PhD student
"This is a fantastic opportunity to raise public awareness of unique but often neglected architectural gems from our past."

Professor Richard Oram
Discovering medieval ‘architectural gems’

Uncovering unique medieval churches is part of the work of Richard Oram, Professor of Medieval and Environmental History. Professor Oram analyses buildings and sites as part of the Corpus of Scottish Medieval Parish Churches project, which is a joint research collaboration with the University of St Andrews. The pilot phase of this project covered 105 parish churches in the dioceses of Dunkeld and Dunblane and previously unrecorded findings included a 13th century medieval crucifixion scene. The Arts and Humanities Research Council is now funding the second phase of the project which covers 258 parishes in the dioceses of St Andrews and Brechin.

Research from the initial study has already been used by academic and non-academic bodies, and evidence from the second phase will be valuable to community, church and heritage groups, as well as to councils and other stakeholders with a role in the use and preservation of the buildings and sites. The substantial body of data collected will be used for developing strategies for the conservation, management and future protection of a major component of Scotland’s historic environment.

Professor Oram said:
“This research project is a fantastic opportunity to raise public awareness of unique but often neglected architectural gems from our past. Our research enables us to focus for the first time on a group of buildings that were central to the lives of the entire population, not just the great and the good. It also enables us to see the buildings developed over time, how those developments reflected changes in our ancestors’ expressions of religious faith and how individuals shaped their development.”

“Projects undertaken collaboratively between institutions and other partner organisations give research students the opportunity to work with a wide range of experts in their chosen field. Joint supervision arrangements are used to ensure students get the optimal benefits from these collaborative research projects.”

Arts & Humanities
http://stir.ac.uk/91
In high income countries, neglect is the most frequent category of child maltreatment. In the UK, as many as one in ten children may experience neglect and yet systems here, and other jurisdictions with similar models, struggle to provide an effective response. Neglect tends to attract less public attention than other maltreatment and all too often children have to endure chronic lack of physical and emotional care over long periods of time before they receive help.

Professor Brigid Daniel (right) conducted a systematic review of literature on the topic of child neglect to identify:

- What is known about the ways in which children and families signal, either directly or indirectly, their need for help
- To what extent practitioners are equipped to recognise and respond to the indications that a child’s needs are likely to be, or are being neglected, whatever the cause
- Whether the evidence suggests that professional response could be swifter.

Professor Daniel and her team have shown that ‘neglect’, as defined by the official system, has become overly complicated and process-bound. Practitioners, such as teachers and health visitors, are able to spot both the direct and indirect signs of neglect, but find that it is difficult to get a response to their concerns from children’s social workers. One of the key findings was that the systems in the UK can actually get in the way of neglected children getting help promptly.

The University of Stirling is committed to ensuring research evidence is put into practice for the benefit of society. The messages from this research have been built into a child-focused framework for practitioners to operate within, and incorporated into a comprehensive suite of training materials for teachers, health practitioners and social workers commissioned by the Department for Education.
At Stirling we work with colleagues across the Higher Education sector, Government agencies, public bodies, and charities to undertake research that informs policy, enhances practice in child protection and ultimately benefits children, families and society.

Professor Brigid Daniel, School of Applied Social Science
There are 2.9 million people diagnosed with diabetes in the UK and an estimated 850,000 people who have the condition but don’t know it.

Diabetes UK
Dr Josie Evans and colleagues in the School of Nursing, Midwifery & Health looked at whether patients using oral hypoglycaemic drugs benefitted from self-monitoring of blood glucose levels.

Type 2 Diabetes is the most common form of diabetes. It results in high blood sugar because cells do not respond to the insulin that is produced; the classical symptoms are frequent urination and increased thirst and hunger. Many patients manage their Type 2 Diabetes through dietary and lifestyle modification, or by using oral hypoglycaemic drugs, rather than by injecting insulin-type drugs.

In Dr Evans’ two-year study, 207 patients in Tayside with Type 2 Diabetes but not treated with insulin, were interviewed to find out how they self-monitored blood glucose levels.

This information was combined with routinely collected health care data. Results showed that patients who self-monitored frequently did not necessarily have improved blood glucose control and only 60 percent of patients took action in response to test readings.

Dr Evans: “There is clearly a lack of knowledge, with patients needing more education about monitoring if they are to monitor effectively. There is no point in patients self-monitoring unless they are educated in how to interpret readings and to respond appropriately and this may be why patients who self-monitored did not seem to have better blood glucose control.”
Scotland’s Curriculum for Excellence (CfE) is generally viewed as a landmark development in Scottish education which calls for a shift in classroom practices towards pupil-centred approaches to education and a renewed view of teachers as professional developers of the curriculum. Despite the far-reaching implications of this innovation, there has been little systematic research to date on the new curriculum. Dr Mark Priestley (above) and colleagues in the School of Education have been conducting research into the implementation of CfE in a single Scottish local authority, funded by the Scottish government.

The research showed that while the majority of teachers welcomed the general principles of CfE, in many cases there was a lack of fit between the philosophy of the new curriculum at a fundamental level and teachers’ views of knowledge and learning. Many teachers perceived mixed messages in policy relating to CfE, including tensions between its open ways of working and a continued emphasis on accountability driven by pressures to raise attainment.

Insufficient time allocation to implementation in many schools meant teachers were unable to engage in the high-quality dialogue required to make sense of complex and often novel concepts around teaching and learning. Progress in the implementation of CfE has been variable across and within schools.

From the research comes a recommendation for the adoption of a ‘big picture’ approach in the implementation of the new curriculum. Enhanced clarity of purpose and a greater understanding of the big ideas of the curriculum could be achieved by providing more opportunities for sense-making by teachers. Systematically addressing the barriers and drivers impacting upon CfE implementation and considering whether content and methods are fit for purpose would also enhance the implementation process. The research concludes that curriculum development is an on-going process rather than a one-off activity and therefore requires regular cycles of development.

www.stir.ac.uk
“The MRes provided me with a valuable opportunity to critically engage with educational research, policy and practice. I developed the skills to carry out independent empirical research and had the opportunity to become involved in a departmental research project. This first-hand experience allowed me to make links between theory and practice. It also provided me with an opportunity to learn from and to engage in dialogue with academics and experienced researchers. I would recommend the MRes as essential preparation for doctoral study or to educational professionals undertaking research in their area of practice.”

Michelle Eager, MRes in Educational Research
Useful information

Why join Stirling’s PhD cohort?
Research excellence underpins all that we do. Our interdisciplinary research is focused on the needs of society. As part of our research community you will contribute to innovative, practical and applied solutions to the challenges facing society today.

Along the way you will foster a network of lifelong contacts, be integral to our world-class research environment and develop high level transferable skills positioning yourself at the forefront of your field.

Whatever your future holds, as a career academic or excelling in another field of expertise, you will graduate with a high quality, well respected research degree.

Types of PhD and modes of study
As well as being able to study full-time and part-time, we have a suite of programmes offering a variety of modes of study. These include:

Traditional PhD
A programme of original research leading to the production of a thesis.

PhD by publication
Submit a selection of published papers. You must demonstrate evidence of an original and distinct contribution to knowledge within the discipline.

PhD by practice
Create a portfolio of work which is accompanied by a substantial analytical commentary demonstrating originality, critical assessment of ideas and relating these to a wider field of knowledge.

MRes
Research Master’s degree courses are part taught and include training in research methods and research ethics. They also cover professional practice issues such as writing proposals and publishing, with a focus on subject-specific research. The course culminates in a substantial, written dissertation.
Funding
Funding to meet the costs of your fees and living expenses can be accessed through a number of sources including the UK Research Councils, various trusts and charities, commercial sponsors and University sponsored studentships.

Additionally, some students choose to finance their own doctoral studies.

For information on sources of funding, visit:

- www.stir.ac.uk/postgraduate/financial-information/sources-of-funding

The next steps
Do you have the passion, dedication and potential to generate new knowledge and to integrate into a world-wide network of research experts? If the answer is yes…

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...who should you talk to?
Identifying the most appropriate supervisor for your project is critical for your future success. For further information, visit:
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...how do you apply?
A Research Proposal is a necessary part of the application process. Your supervisor will be on hand to provide guidance. For further information on applying, visit:
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The next steps
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