

<p>Institution: Staffordshire University</p> <p>Unit of Assessment: 19 – Business and Management Studies</p> <p>a. Overview</p> <p>Research in business and management is supported and guided within the Centre for Applied Business Research (CABR – see below). Within CABR, Research on Emerging Markets takes place within the Centre for Research on Emerging Economies (CREE): http://www.staffs.ac.uk/academic_depts/fbel/cree.jsp. Associated with CREE are outputs from Iraj Hashi and John McManus (REF2), one of our two impact case studies (REF3b) and that part of our PhD programme supported by the Open Society Foundations (REF5 - below). We are still too small a community of researchers to require further institutional sub-divisions. Nonetheless, we do have strategic themes and common interests that make the whole greater than the sum of its parts. Organisations and their performance associates the REF2 outputs of Rune By in organisational leadership and change, Mike Dent in health management, Geoff Pugh in policy and programme evaluation, and John Ramsay in purchasing and supply chain management. In addition, the REF3b case studies concern, respectively, the broad performance implications for firms of employee participation and the particular performance implications of fiscal reform for one targeted sector of micro and small firms. Concern with inequalities, employment and 'welfare' is the connection between several of the REF2 outputs of Jon Fairburn (indices of multiple deprivation and environmental justice), Keith Puttick (labour market regulation, State support for wages, and EU free movement/migrants' social rights) and Mike Dent (social inclusion). A related agenda is emerging from Jon Fairburn's research on policy drivers of change in the health sector, John McManus's work on the challenges faced by European healthcare providers and Mike Dent's research on organisational change in the health sector.</p> <p>b. Research strategy</p> <p>Background and self-evaluation. In 2008, there was no RAE submission in the Business and Management unit of assessment from Staffordshire University. Nonetheless, in the years before 2008 research activity had developed in business and management, as demonstrated by the impact studies and strategy reported in REF 3a&b, which are rooted in long-established research agendas, and a PhD programme in applied economics (reported below) that, beginning in 2000, was built up to four completions in 2007. This research activity gave the platform upon which we developed our strategy for research in business and management from 2008 to date. According to this strategy, our research in business has diversified as well as grown in both quality and quantity. Evidence for this positive self-evaluation includes our 33 REF2 outputs; substantial research funding (REF4); and our PhD programme detailed below (32 completions since August 1st 2008; the 26 recorded in REF4 do not account for three economics PhDs submitted in the Education UoA and three management PhDs completed in faculties other than Business, Education and Law).</p> <p>Strategy: evidence of implementation and corresponding activities. Since 2008, the Business School has committed to developing and implementing a research strategy in business and management. The key elements of this strategy are as follows.</p> <ol style="list-style-type: none"> 1. Timetabled Research Allowances (TRAs), in addition to the contractual minimum, allocated annually on a competitive basis to a total of eight established and early career researchers. TRAs prioritise publication in high-impact peer-reviewed journals in business and management but, especially where interdisciplinary research is supported, publication in journals associated with other disciplines is also routinely supported. 2. In 2009, an institutional vehicle was established to realise this research strategy: the Centre for Applied Business Research (CABR). Iraj Hashi (REF2), the Director of CREE, and Geoff Pugh (REF2) took on the planning and then the leadership of CABR, which has a small operating budget (c. £25,000 p.a.). Although CABR was developed from within the Business School, its mission has been to support and develop business and management research throughout the University, for example: in the Health Faculty, health management research led by Professor Mike Dent, whose publications contribute to the outputs detailed in REF2 and

whose PhD graduates contribute to REF4/REF5; and in the Law School where legal aspects of business, management and employment – especially in SMEs – are an established focus of research (hence the contribution of Keith Puttick to REF2 as well as to REF4/REF5 through his co-supervision of Penny Brookes’ PhD on SMEs and labour law).

3. The Centre for Research in Emerging Economies (CREE) was integrated into CABR; CREE is responsible for the research underpinning Case Study 2 in REF 3b.
4. In 2010, the appointment of John Fairburn (see REF2) as an Enterprise Reader within CABR strengthened the leadership team in business sustainability – in particular, environmental issues - and established strong links between CABR and researchers in the related areas of health management and health policy.
5. To support the development of a limited range of research agendas financially, CABR’s strategy has been to bid for projects that are both appropriate for our community of applied researchers and of sufficient intellectual potential to give rise to subsequent publication in high-impact peer-reviewed journals. Success in bidding for externally-funded research projects provided resources and created opportunities to involve new colleagues in research, thereby building capacity.
6. To build capacity, research potential was given a higher priority in the recruitment of new staff, all research-active colleagues are committed to mentoring, and we help early career researchers (ECRs) to develop their potential. (Further explanation and evidence are offered below, in Section 3.) *Our strategy is to develop and realise existing potential.*
7. Capacity building both contributes to and enhances the research culture that animates our research environment (see Section 5 below).
8. To build on existing strengths (e.g. in transition and emerging markets) and to diversify as opportunities arise and capacity permits (e.g. into organisational change and change management, in particular in health). Both are apparent in REF2.

Evidence for the upward trajectory achieved by this strategy is the increasing number of REF2 outputs: from 11 in 2008-10 to 22 in 2011-13. The number of REF2 outputs by year is:

2008	2009	2010	2011	2012	2013
4	4	3	10	6	6

This upward trajectory would be all the more pronounced were we to include the publications of two colleagues with three outputs of the right quality for the REF. In addition, the research agendas underpinning our impact case studies in REF3b continue to evolve and diversify. Sustainability is ensured by capacity building (especially by supporting ECRs) and by our correspondingly increased ability to attract increasing research funding (REF4 and below).

Procedures for monitoring and attainment of targets. Progress is monitored in three interlinked ways: regularly by meetings of the CABR Management Group; reporting by CABR through the Faculty Business Review process (each Spring); and through the University’s process for monitoring its 11 Applied Research Centres, which include CABR (each Autumn). Objectives related to the doctoral programmes and their quality are monitored by University academic review processes, which include annual monitoring of each individual research student as well as of whole programmes by the Faculty and University Research Degrees Committees. TRA awards are monitored by the Faculty TRA Committee chaired by an Associate Dean and supported by members of the CABR Management Group.

Future directions. The Faculty aim is to grow our profile and reputation through outputs, income and other esteem factors over the next 5-10 years. Central to this is our commitment to growing PGR numbers, to engendering a proactive early career researcher (ECR) group and to expanding our Professoriate to include senior researchers in all our key subject/discipline areas. Areas targeted for growth in terms of staffing – and, hence, corresponding research capacity and outputs - include marketing, finance and strategy.

Staff and PGR student development will be a strong focus in the faculty leading up to the next REF. We have fully embraced the Vitae Framework and are confident that we will increase considerably the number of staff qualified to supervise from currently 25 to well over 40 over the next 2-3 years. We have a substantial track record in European funded projects and we see this as a major strength of our research capability that we can exploit further over the coming years.

c. People, including:
i. Staffing strategy and staff development

As noted in the previous section (Point 6), developing people is at the heart of our strategy. Our research potential is largely “home grown”: of our senior researchers submitted in REF2, Mike Dent, Iraj Hashi, Geoff Pugh, Keith Puttick and John Ramsay have all worked at Staffordshire University for 20 years or more; and Jon Fairburn – a mid-career researcher - for more than 10 years. Nonetheless, since 2008, every effort has been made to recruit staff with a commitment to research. Evidence for this, is that among the colleagues submitted in REF2 are Rune By and John McManus, appointed in 2010 and 2012 respectively. In addition, within the past two years we have also appointed five promising early career researchers, all with doctorates and excellent research potential. We are disappointed to be able to include only one ECR - Jana Fiserova – in REF2; in part, this is the consequence of the current long delays at the “revise and resubmit” stage of publication. However, looking ahead, we are supporting our ECRs in two ways: all have Timetabled Research Allowances; and four are involved in PhD supervision as second supervisors, thereby not only benefitting our research students but also themselves being mentored by the Principal Supervisor (all of whom have contributed their outputs to the REF, either under Business and Management or in other UoAs). While the senior researchers submitted in REF2 are all male, our successors are not: of eight colleagues awarded TRAs, seven are female ECRs who, as a group, are characterised by an ethnic diversity lacking among the older researchers.

All of our senior researchers mentor ECRs and/or mid-career researchers with less experience. Patterns of mentoring are revealed in REF2: Mike Dent with Stephen Suckling (ECR); Geoff Pugh with John Fairburn (mid-career); and John Ramsay with Stephen Kelly (ECR). Another mentoring success is reflected in both the outputs (REF2) and impact case studies (REF3) of this submission: Wyld, J., Pugh, G. and Tyrrall, D. (2010) was the outcome of a project to which Geoff Pugh contributed not only individually but also by mentoring John Wyld. The third author, David Tyrrall is a Visiting Professor at Staffordshire University and demonstrates another dimension of our “people strategy”. Mentoring arrangements also includes a part-time Research Fellow and two part-time Research Assistants appointed on post-graduate scholarships by CABR: all of these junior colleagues are completing higher degrees; and two of them now have papers under submission to high-impact journals in Business and Management.

This submission does not resort to short-term appointments of research “stars”. Instead, our research strategy is supported by long-term relationships with external practitioners whose research commitments both benefit from and contribute to our research. Since 2006, David Tyrrall has been at the Department for Business, Innovation and Skills: first as Deputy Director for Accounting, Audit and Better Regulation; and, more recently, as a Seconded National Expert from BIS UK to the Task Force for Greece in the European Commission. Evidence that David is a long-standing member of our research community is his co-authorship of: Pugh, G., Tyrrall D. and Wyld, J (2001) (REF3b, Case 2); Wyld, J., Pugh, G. and Tyrrall, D. (2010) (see both REF2 and REF3b); and Wyld, J., Pugh, G. and Tyrrall, D. (2012) (REF 3b). In addition, David has also published on the subject of International Financial Reporting Standards (IFRS): Tyrrall, D. and Aggestam, C. (2011) International Financial Reporting Standards, *Accounting Education: An International Journal*, Volume 20, Issue 4, pp. 441-456; and Tyrrall, D. (2008) Globalisation of Accounting Standards and Accounting for Capitalism, in *European Accounting Review*, 17(2) pp. 401-407. Professor Tyrrall visits Staffordshire University and participates in the supervision of two PhD students working on finance-related areas of macroeconomics. The research work with Staffordshire University has both informed and been informed by his close engagement with national and international policy issues. For example, David was responsible for steering Part 15 of the 2006 UK Companies Act through its final Parliamentary stages, and – in his words (extract from an e-mail, available on request) – “the research on small business informed a number of decisions on the content of regulations for small businesses ... currently, this Staffordshire University research in the fields of small business and IFRS is informing policy advice to the Greek Government on the reform of Greek Accounting Law, and there are clear plans for future publications derived from this engagement too”. Dr Jane Kennedy is Research Manager for the

Environment template (REF5)

London Borough of Newham. As well as being a visiting Fellow in CABR (from June 2012) she is also a Policy Fellow for the Centre for Science and Policy, Pembroke College, Cambridge University, and has co-authored two papers: one with colleagues at Staffordshire - Douglas, D., Jenkins, W. and Kennedy, J. (2012) Understanding Continuous Improvement in an English Local Authority: A Dynamic-Capability Perspective, *International Journal of Public Sector Management*, Volume 25(1) pp. 17-33; and one with external collaborators - Williams, L., Bovaird, T., Brown, H., Allen, K., Dickinson, H., Kennedy, J. & Glasby, J. (2012) Designing whole-systems commissioning: Lessons from the English experience, *Journal of Care Services Management*, Volume 6(2) pp. 83-92.

ii. Research students

Much of the impact of research at Staffordshire University in Business and Management is accounted for by our current and recent PhD graduates. In the period covered by the current REF, postgraduate research in Business and Management has been developed in two main areas: in applied economics (25 PhDs awarded between August 1st 2008 and July 31st 2013, including three submitted in the Education UofA); and, more broadly, in aspects of private- and public-sector management, including marketing and organisational change (7 awarded since August 1st 2008, including three awarded in faculties other than Business, Education and Law). In 2011, we inaugurated a Doctorate in Business Administration (DBA) programme, which now has 34 students enrolled. Most of our PhD graduates are in research-related posts; or, in some cases, have already moved on to senior leadership roles as varied as the Chief Economist of the Central Bank of Bosnia and Herzegovina and the Research Business Manager of the London Borough of Newham. REF4 and limited space in REF5 do not enable full accounting for the size and success of our PhD programme. Hence, a detailed record of our PhD graduates has been placed on-line as the evidence base to support this section: www.staffs.ac.uk/research/cabr/phd.

Currently, and in recent years, the PhD programme in Applied Economics constitutes a community of around 30 research students. Under the “blended learning” programme supported by the Open Society Foundations (see below), around 25 of these study full-time at Staffordshire University for one semester each year for four years and part-time in their home country during the remaining part of the year (with continuous on-line support). While studying, our PhD students typically hold posts as lecturers and researchers in universities, in central banks, and in government ministries. In addition, a smaller number of PhD students from the UK and overseas complete their PhD research by conventional part-time or full-time study. The quality of their research is demonstrated by publications in high-impact journals, international prizes, post-doctoral scholarships and employment in international organisations through international competition: papers arising from PhDs have been published in, for example, *Eastern European Economics*, the *Cambridge Journal of Economics*, the *International Review of Economics and Finance*, the *Oxford Bulletin of Economics and Statistics*, *Applied Economics*, the *European Journal of Political Economy*, *The Economics of Transition*, *Comparative Economic Studies*, the *Journal of Post Keynesian Economics*, *Small Business Economics* and *Research Policy*; in 2008 and 2010 the Olga Radzyner Award by the Central Bank of Austria for one of the four best research papers by authors from Central and Eastern European countries included one of our current PhD students and one of our PhD graduates, respectively; in 2012, four Olga Radzyner awards were made, one of which went to a Staffordshire PhD graduate and a further two to current Staffordshire PhD students (recognising published work arising from PhD research);¹ scholarships include major international awards - for example, four Fulbright scholarships;² and Staffordshire PhD graduates at international organisations include recent economist appointments to the World Bank.³

PhD completions in Applied Economics (Left sub-column by year) and in other areas of Business and Management (Right HS): from August.1st 2008 to 31st July 2013

	2008		2009		2010		2011		2012		2013		Total	
Female	2	0	0	2	3	1	2	1	2	0	3	0	12	4
Male	3	0	3	2	2	0	4	0	0	1	1	0	13	3
Total	5	0	3	4	5	1	6	1	2	1	4	0	25	7

Environment template (REF5)

This gender balance arises from a policy of promoting the professional development of young women. The impact of this policy is particularly apparent in South Eastern Europe. The detailed on-line record (see below) of our PhD alumni documents not only a major channel of impact for economics research conducted at Staffordshire University but also the success of our programme in helping to establish many women in careers as economists, with several already in senior positions. Each PhD student has two supervisors, at least one of whom is an experienced researcher, and who are required to complete the University's Supervisory Training Module. In addition to training in research methods other than in their subject specialisms, which is common to all Staffordshire PhD students, PhD students in business and management participate once or twice a year in "Mini-Conferences" at which they present their latest work to their peers, their supervisors and to an external expert. New students gain a first experience of presenting their research in a formal setting as well as preparing more advanced students to present at international conferences.

¹The Staffordshire prize winners were, respectively: Sokol HAVOLLI (2008 – current student); Marjan PETRESKI (2010 – then a current student); Selena BEGOVIC (2012 – current student); Jane BOGOEV (2012 - graduate); and Rilind KABASHI (2012 – current student).

http://www.oenb.at/en/ueber_die_oenb/foerderung/stipendien/radzyner/radzyner.jsp

²Our four PhD graduates awarded Fulbright scholarships are: Ruslan DZARASOV; Petrit GASHI; Sandra HLIVNJAK; and Valentin TOCI. Details on each PhD graduate and their respective thesis topics are to be found in the on-line record.

³For example: Erjon LUCI (World Bank, based in Tirana); Jane BOGOEV (World Bank, based in Washington DC); Sandra HLIVNJAK (World Bank, based in Sarajevo); and Zorica KALEZIC (World Bank, based in Washington DC). This is not an exhaustive list. Details in each case are to be found in the on-line record.

d. Income, infrastructure and facilities

The first evidence of our strategic approach to gaining external funding to support research is our PhD programme in Applied Economics. In each year since 2000, the Open Society Foundations (OSF; <http://www.opensocietyfoundations.org/>) has supported five joint OSF-Staffordshire University scholarships for young economists from Albania, Bosnia and Herzegovina, Croatia, Kosovo, Macedonia and Montenegro to complete doctoral research in economics at Staffordshire University. (In recent years, OSF funding has been c. £160,000 p.a.) As well as the achievements documented above, five of the outputs detailed in REF2 are the outcome of joint authorship with current or former PhD students: Suckling, S., Ryan, P. and Dent, M. (2009); Gashi, Hashi and Pugh (2013); Hashi and Krasniqi (2011); Effendic, Pugh and Adnett (2011); and Hashi and Stojcic (2012). The second evidence is that both of our REF3b impact case studies arose – to a greater or lesser extent - from externally funded projects as did four of our outputs in REF2: Pugh and Fairburn (2008) – from a project commissioned in 2006 by the Southern Staffordshire Partnership; Fairburn J., Butler B. and Smith G. (2009) – from Environment Agency Report No. GENE0608BODZ-E-E; Pugh, Mangan and Gray (2011) – from a project commissioned in 2007 by the then Department for Children Schools and Families (see also REF3a); and Hashi and Stojcic (2012) – from the 3-Year (2007-10) EU Framework VI MICRODYN project (*The competitiveness of firms, regions and industries in the knowledge-based economy: What room for job-rich growth in Europe?* European Commission's Framework VI Programme, Grant No. 028868(CIT4) [coordinated by the Vienna Institute for International Economic Studies (WIIW)]).

During the current REF period, we have secured around £600,000 of external research funding (REF4). Of this, £325,000 is accounted for by an award from the National Institute for Health Research (NIHR) to Mike Dent: "Investigation of innovative solutions for the management of patient information across organisational boundaries" (2008-2011). Other than this, from a low base we have steadily built up external income for business research more broadly. As an example of the importance of external funding, substantial research in the REF period arose from an EU FP7 project to evaluate innovation support programmes for SMEs in traditional manufacturing sectors (GPrix). This drew on two strands of our previous research: applied research projects for the Ceramics Industry Forum and other bodies associated with the industry (reflecting our location,

Environment template (REF5)

Stoke-on-Trent in the West Midlands); and a developing reputation for (quantitative) evaluation studies, several of which are listed in REF2 and REF3b (e.g. Pugh, G. and Fairburn, J., 2008). This project enabled us to invest in research on SME innovation, especially in traditional manufacturing industry. Evidence for this is a major on-line knowledge base (<http://www.gprix.eu/>), demonstrable impact (reported in REF3b), papers for research conferences and two papers currently under submission (but which, allowing for the usual lags, will not appear within the current census period). GPrix financed substantial research time for Jon Fairburn and Geoff Pugh, both submitted under REF2, but also for two mid-career colleagues who are not included in REF2 but who are among our “successors”, both having published papers in high-impact journals (although not the four required). This example explains why European funding is central to our strategy: exploiting existing and building new networks; emphasis on applied research; support for dissemination, including scientific publication; and, above all, a scale of support that allows new colleagues to be resourced with time for research and to be mentored by experienced researchers, thereby building capacity. Here, both the Faculty and the University are most helpful in adopting a flexible approach to research overheads. Other projects have made similar contributions to our strategic objective of developing “home grown” research capacity.

Physical infrastructure and administrative support is provided by the Faculty and is entirely satisfactory. For example, CABR supplements other Faculty resources to ensure that staff and doctoral research is never hindered by lack of new or upgraded software for either quantitative or qualitative research; finance is provided to attend important conferences and other networking events; and, where necessary, external training is financed (e.g. on STATA programming for our quantitative researchers). This provision applies to staff and PGRs alike. University policy is supportive. In particular, colleagues in the Enterprise and Commercial Development Department provide professional support in scoping external sources of research funding and in assisting major bids (e.g. providing crucial support for the GPrix bid). Staff research projects undergo ethical scrutiny and need approval of the Faculty Ethics Committee before the commencement of research.

e. Collaboration and contribution to the discipline or research base

The established researchers responsible for the outputs listed in REF2 contribute to deepening our research culture through both their internal and their external activities. **Internally**, our established researchers contribute to all or at least most of the following: research seminars for staff and postgraduate students; PhD supervision; mentoring; and writing bids for externally funded research projects. **Externally**, the activities of colleagues in the Business and Management submission demonstrate wider influence or contributions to the research base through: journal editorship (Rune By is Editor-in-Chief of the *Journal of Change Management*); membership of editorial boards and or review colleges; presentations, membership of programme committees, track leadership and keynote addresses at international conferences; conference and seminar organisation; research-based CPD; PhD examining (from the perspective of the whole academic community, reciprocating the service rendered by our own external examiners); contribution to professional associations/learned societies; contribution to national/international developmental disciplinary initiatives; contributions to research volumes edited by leading scholars; and research monographs. In turn, what these colleagues bring back from these activities enriches our research culture (e.g. by attracting eminent PhD examiners and contributors to our research seminars and PhD “Mini-Conferences”). *All of this is documented in detail on the CABR website, www.staffs.ac.uk/cabr.*

Because much of our research is predicated on our ability to attract external funding, impact is “built in” (see REF3a). Moreover, because clients typically require a range of research expertise to address their concerns, the same strategic imperative helps to explain our track record of **interdisciplinary research**. Accordingly, our REF2 research is published not only in mainstream business and management journals but also in journals associated with fields such as regional science (*Regional Studies* – collaboration between a geographer and an economist) and education policy (*British Educational Research Journal* – a collaboration between two Staffordshire economists and a Cambridge Educationalist). Currently, research and publication on innovation

Environment template (REF5)

arising mainly from the GPrix project is being progressed by colleagues from economics, marketing and strategic management in collaboration with established innovation specialists at UNI-MERIT, Hugo Hollanders and Réne Wintjes (<http://www.merit.unu.edu/>). Because our main focus is on applied research and lines of communication are short, internal collaboration arises either informally or by way of brokering within CABR. Otherwise, no special arrangements are needed to support interdisciplinary or collaborative research. We have noted above that TRAs are used to support discipline-based and interdisciplinary research on the same criterion of quality. In REF3a&b and in this document we have given evidence of research networks that involve **local, national and international stakeholders from both the public and private sectors** (i.e. outside of HEIs), which include: the Southern Staffordshire Partnership; the West Midlands Economic Forum; the London Borough of Newham; the Campaign for Real Ale (CAMRA) and the Society of Independent Brewers (SIBA); NESTA; the TSB; the Environment Agency; the Department for Children Schools and Families; EU institutions (including the European Economic and Social Committee, EU Commission Directorates - Employment and Research - and the European Parliament); the European Centre of Employers and Enterprises Providing Public Services; the Open Society Foundations; the New South Wales Department of Education and Communities; and the Council of the Central Bank of Montenegro. Each of the underlying research agendas or individual projects reflects **academic collaborations**. In addition to mentoring partnerships, **internal collaborations**, either with other colleagues in Business and Management or with colleagues in other units of assessment (especially Education), are evidenced in joint publications in REF2 and in REF3b, Case Study 2. In the Overview (above) we note the emerging agenda of health-related research. **External collaborations**, including with an External Fellow and Professor, account for most of the remaining REF2 outputs as well as REF3b, Case Study 1. European and international networks underpin and, in turn, develop through bids and joint work on projects and build reputation: for example, Iraj Hashi is a key player in networks responsible for many of the research collaborations documented in this submission; Geoff Pugh is a leading member of the Meta-Analysis in Economic Research Network, as evidenced by his membership of an authorial collective of leading practitioners invited to publish 'Meta-Analysis of Economics Research Reporting Guidelines', *Journal of Economic Surveys*, Vol.27(2), pp. 390–394, April 2013; Jon Fairburn is a member of an Expert Group of the World Health Organisation, European Region, which produced a report for the Fifth Ministerial Conference on Environment and Health in 2010 and which gave rise to Braubach M. and Fairburn J. (2010) (REF2) as well as to further reports in 2011 and 2012 (<http://www.euro.who.int/en/health-topics/environment-and-health/pages/social-inequalities-in-environment-and-health/publications-on-environment-and-health-in-the-european-region>); and Mike Dent's recent national and European collaborations in health management arising from his roles (i) as principal investigator in a national research project (NIHR 08/1803/226 - investigating e-health communications within the NHS) and (ii) as Chair of the User Voice Working Group in the European COST Network (IS0903) resulted in special issues 'in press' of both the *Journal of Health Informatics* and of the *International Journal for Public Sector Management*. Finally, we support junior researchers - especially ECRs - with mentoring and finance to develop their research through external collaborations. A current example is Jana Fiserova (ECR; REF2), who is a partner in a €4 million bid with the University of Rzeszow, Poland, to the European Regional Development Fund: "Interdisciplinary Research Development in the Podkarpackie Region". Jana's role will be to investigate innovation and knowledge transfer in connection with human, social and organizational capital within the firm.