

Institution: The University of Nottingham

Unit of Assessment: UOA 3: Nursing and Allied Health Professions

a. Overview

The research strategy for this Unit of Assessment (UoA) is to provide education and undertake research that is innovative, world-leading and makes a positive impact on the health and wellbeing of individuals and populations. This strategy builds on our successful RAE2008 submission, which:

- Established the School of Nursing and Midwifery as a leading research centre in the UK;
- Rated the 'Allied Health Professions and Studies' as a world-leading centre.

This Environment submission evidences the vitality and sustainability of our research environment by demonstrating the significant progress we have continued to make since RAE2008 (Table 1).

Table 1 – Improvement in key performance indicators since RAE2008

	RAE2008 (UoA 11 & 12)	REF2014 (UoA3)	Change from RAE2008
Research Awards	£4.36M	£13.99M	321%
PGR graduations	23.50	76.49	325%
Athena SWAN awards	None	Institutional Silver Award School Bronze Award	
Government Honours	None	MBE (Walker)	

The impact case studies submitted as part of this assessment exercise further evidence the influence of our research on patients, carers, students, health providers, health provision and organisational culture at both national and international levels.

Since RAE2008 Schools within the Faculty of Medicine and Health Sciences at the University of Nottingham (UoN) have been reconfigured. The current School of Health Sciences makes up the majority of this submission (75%), with the addition of staff from the Divisions of Rehabilitation and Ageing and Psychiatry and Applied Psychology (Centre for Organizational Health and Development) in the School of Medicine, making up the remaining 25%. Researchers from these two Schools work collaboratively in five distinct but overlapping research groups and themes. **Research Themes**

<u>Mental Health</u> This research group is organised under four broad headings: (1) H.E.A.L.T.H (Help Enable Active Lifestyles Towards Health); (2) Health Humanities; (3) Arts and Health; (4) Recovery and Social Inclusion. This research group collaborates with health and social care users and carers to enable people to recover from mental distress and promote their social inclusion. It is guided by a vision that research will have demonstrable outcomes that improve mental health and social care provision, influence policy, advance theory and develop practice. The impact case study '*Recovery in mental health: generating, translating and evaluating evidence in policy, practice and education*' submitted as part of this assessment exercise exemplifies the work of this group.

Sue Ryder Care Centre for the Study of Supportive. Palliative and End of Life Care This group carries out research that leads to a greater understanding of the patient experience of chronic. debilitating and life-threatening illness and improvements in the delivery of healthcare. The research focus is on under-researched areas such as older people, stroke and dementia, and crosses over with that of the rehabilitation and ageing theme. The remit of this group extends along the continuum of prevention, screening, diagnosis, treatment, follow-up and care of the dying and the translation of research findings into service development initiatives. The impact case study 'Improving understanding, implementation and uptake of advance care planning for end of life care', submitted as part of this assessment exercise, exemplifies the work of this group. Maternal, Child and Public Health This research group investigates the health and guality of life of children, young people, childbearing women and adults, including those with acute and lifelong conditions. Goals include conducting research to enhance understanding of differences in health during pregnancy, early life and adulthood and the development, implementation and evaluation of interventions to improve the delivery of healthcare, particularly using education packages. Rehabilitation and Ageing This research theme comprises academics from both the School of Health Sciences (SoHS) and the School of Medicine (SoM) and improves the health and wellbeing of people, of any age, who are disabled. It is organised under four broad headings: (1) stroke rehabilitation; (2) long-term conditions; (3) community rehabilitation; (4) healthcare of older



people. The research goals include conducting internationally recognised applied health research that leads to:

- an improvement in the health and wellbeing of frail older people;
- developing and implementing rehabilitation techniques that improve the quality of life, in a costeffective way, for people with severe health conditions.

This research group seeks to produce a sustainable critical mass of researchers in the field. Its work is exemplified by the impact case study '*Implementing evidence-based community based stroke services*' submitted as part of this assessment exercise.

<u>Education and Technology for Health</u> This group builds research evidence in the delivery of healthcare education and develops the use of technology in teaching, learning and practice. Research projects are based around three broad themes: (1) practice-based education; (2) curriculum enhancement; (3) e-learning and health informatics. Research reflects the iterative processes that underpin educational development, evaluation and curriculum delivery. Projects involve multi-disciplinary teams including health professionals, learning scientists and media developers. The impact case study '*Implementing user-designed multimedia learning tools in healthcare contexts*', submitted as part of this assessment exercise, illustrates the work of this group.

The <u>Centre for Organizational Health and Development</u> is one of only three World Health Organization (WHO) Collaborating centres in occupational health in the UK. Its work for WHO covers four themes: (1) work organisation and the management of the psychosocial work environment for business and societal sustainability; (2) developing healthy and sustainable workplaces through responsible business practices; (3) the prevention of work-related stress and promotion of mental health in the workplace; (4) policy-level interventions in occupational health and safety. The research of this group seeks to make a significant impact on scientific debate, on government policy and on real-world practice. Researchers work closely with professional and practitioner communities, in both private and public sectors, to turn knowledge into practical applications. The impact case study '*Preventing psychosocial risks and work-related stress in Europe: impact on policy and practice*', submitted as part of this assessment exercise, highlights the work of this group.

b. Research strategy

The research strategies for both SoHS and SoM are written by the Directors of Research in collaboration with their Research Governance teams and ratified by School Executive Committees. These research strategies reflect UoN's research strategy and are revised on a five-yearly basis; both have a clear set of objectives based on the delivery of research income, supporting professional development of academic staff and early career researchers, increasing PGR student numbers and improving the experience of all research staff and students within the School (Table 2). Delivery of the research strategy objectives is monitored by the respective School Executive Committees.

Table 2 – Research objectives and progress towards objectives since RAE2008

Staff capacity and capability building

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Recruitment of	Appointment of:
staff at	• Four new Professorial staff to provide strategic research leadership in:
professorial and	Maternal, Child and Public Health (Spiby); Adult Nursing (Moffatt);
non-professorial	Rehabilitation (Drummond); Supportive and Palliative Care (Johnston,
level to maintain	commencing 01.12.13);
critical mass in	One Associate Professor in Rehabilitation Research (Radford).
key research	As part of our staffing strategy we will appoint three further positions
areas	(Professor of Nursing; Professor of Learning and Teaching; Professor of
	Physiotherapy) by 2015 to further strengthen these core areas.



	Kesearch Excellence Framework
Development of junior staff as research leaders of the future.	 The Directors of Research are alerted to contract end dates and meet with research staff 6-9 months prior to contract end in order to identify specific funding strategies to retain them. Junior staff are mentored to apply for a number of fellowship schemes, including 'UoN Anne McLaren', 'Nottingham Research' and NIHR Post-Doctoral Fellowships. Successes include: Faculty-funded 'bridging awards' (Mulvaney, Meade); NIHR 'Doctoral' Fellowship awards (Whitehead); Stroke Association Senior Research Training Fellowships (Threapleton); NIHR Senior Research Fellowship (Logan); NIHR Senior Investigator (Walker).
Partnerships wit	h Key Stakeholders
Development of sustainable partnerships with clinicians and other stakeholders to strengthen research activity and implementation of research outcomes.	A strong collaborative partnership with Nottingham University Hospitals NHS Trust (NUH) has led to the appointment of the Directors of Research and other members of the SoHS as members of the NUH 'Nursing Research' and 'Allied Health Professional' Strategy Groups. Similarly, the Director of Nursing Research for NUH sits on the SoHS Research Knowledge Exchange Committee and holds an honorary senior research fellow position in the SoHS. Three NUH geriatric medicine consultants also hold honorary Professorial positions in SoM. Academic staff hold joint clinical positions with local NHS trusts (Nottinghamshire Healthcare NHS Trust – Repper; Nottingham CityCare Partnership – Logar; Derby Hospitals NHS Foundation Trust – Moffatt, NUH – Gladman, Goldberg). Since 2011 researchers from this UoA (Logan, Morrell) have collaborated with NUH to develop an internship scheme for non-medical professionals and have actively engaged with mentoring these professionals (Avis, Callaghan, Drummond, Moffatt). Similarly, UoA researchers (Hemingway, Lymn) have acted as mentors to health professionals undertaking
	 internships funded by the East Midlands Health, Innovation and Education Cluster (EMHIEC). These schemes aim to develop links with practice and encourage clinicians to become involved in research. Patient and Public Involvement (PPI) features strongly in the research activity of all components of the UoA, with service users co-leading studies, collaborating, providing consultation and working in partnership with researchers. This success is exemplified by the training of mental health service users in research methods funded by an NIHR Programme Grant Development Grant in 2011 (Callaghan).
Grant Awards	
Improvement of externally funded grant application success.	In 2012 the UoA launched an internal peer review system for research grant applications. The scheme gives constructive critical feedback to Principal Investigators submitting grant applications to external funders. Research staff with relevant expertise review each grant application in good time prior to submission. The scheme acts as a critical friend to enhance the quality of grant submissions (with a view to increasing our success rate) and to help develop grant writing and critical review skills for staff at all levels.
Greater focus on the submission of Programme / EU grants	 The recent focus on submission of large-scale (Programme) and EU grants has already had significant success: Two EU FP7 grants (€8.9M – Coulson, CI; €4.8M – Seymour, CI); NIHR Programme Grant (£1.8M – Callaghan, CI); MRC/AHRC Programme Grant (£1.5M – Crawford, PI); NIHR HTA Commissioned Call (£1.5M – Drummond CI). The recent award of these large grants (total values shown above) means that they do not feature in the 'income' aspect of this submission – which is concerned with research spend – but they are exemplars of the vitality and sustainability of the research environment of this UoA going forward post-



	REF2014.				
Postgraduate Re	Postgraduate Research Capacity and Capability				
Increase PhD supervision capacity	SoHS has supported or is currently supporting 59 members of staff with doctoral study providing up to 75% contribution towards fees and study leave along with conference attendance and other professional development activities. All staff returned in this UoA are involved in PGR supervision.				
Increase PGR student numbers	SoHS played a key role in securing re-accreditation (in 2011) for the University of Nottingham Economic and Social Research Council Doctoral Training Centre, one of only 21 ESRC DTCs in the UK. The MA Research Methods Health Pathway, run by SoHS, was accredited by the National Institute of Health Research (NIHR) as the first stage of its Clinical Academic Careers Training Programme for Nurses, Midwives and Allied Health Professionals in 2009 – one of only seven such courses in England. We were one of only five institutions to be re-accredited (of a total of 12 centres) in 2012.				
Improve PhD submission rates and reduce PhD attrition	At July 2013, PhD submission rates are consistently better than the UoN average (3.46 vs 3.8 years). Attrition of full-time PhD students has reduced from 17.75% RAE2008 to 10.75% REF2014. Attrition of part-time students has reduced from 35% RAE2008 to 10.75% REF2014. Work continues to further improve these figures.				

c. People, including:

i. Staffing strategy and staff development

Staff profile

The profile of this UoA's academic staff comprises clinical and non-clinical research staff. The inclusion of non-clinical research staff within the UoA is crucial in providing sociological, psychological and laboratory biological science expertise in the development of health sciences research and teaching at UoN. The staff profile is well balanced, with 20% of staff employed at Professorial level, 31% at Associate Professor/Principal Research Fellow level, 47% at Lecturer/Senior Research Fellow level and the remaining 2% as Research Fellows.

Supporting early career researchers

UoN has been awarded the European Commission's 'HR Excellence in Research' award in recognition of its commitment to supporting research staff and to implementing the Concordat supporting the career development of researchers. In response to this agenda, SoHS developed and appointed (in 2010) to a new strategic role, a Researcher Career Liaison Officer (RCLO). The RCLO sits on a number of School committees in addition to a UoN-wide Research Staff Group tasked with monitoring implementation of the University of Nottingham Concordat Plan and reports to the University's Research and Knowledge Exchange Board (RETB).

Supporting equality and diversity

UoN is one of only four institutions in the UK to have received a University Silver Athena SWAN (Scientific Women's Academic Network) Award (November 2012). This is testament to the commitment of UoN to the issues of equality and diversity. The UoA is equally committed to this agenda, as evidenced by the Bronze Athena SWAN award (SoHS) in September 2013. Prior to a Faculty reconfiguration in August 2013, the School of Community Health Sciences (SoCHS) received a Bronze Award in 2011, of which the Division of Rehabilitation and Ageing and IWHO were divisions. Significantly, UoN's 'Women in Science, Engineering and Technology' committee is currently chaired by a member of this UoA (Walker).

Enhancing career development

UoN offers a range of training and development courses for staff at all levels through its Professional Development department. In addition to this central resource, the UoA has been proactive in introducing its own processes to promote staff development. Exemplars include:

- Junior academics and early career researchers in the Division of Rehabilitation and Ageing and IWHO (now incorporated into SoM) are automatically assigned a mentor who works proactively with these staff to provide support and career development opportunities.
- The SoHS piloted a mentoring scheme for more experienced Research and Teaching (R&T) staff in 2010. Mentees valued the opportunity to focus on their professional development, reflect and develop confidence. As a result of the scheme, 67% of mentees felt more



supported at work. Following its success, the SoHS intend to introduce the scheme throughout the School.

 In 2010 the SoHS developed 'Invest to Succeed', a year-long professional development programme aimed at Level 6 R&T staff to develop the skills necessary to make the move to professorial level. The success of this programme has been marked: three of the 15 participants have secured Chair positions in other institutions (Allcock, Arthur, Redsell); a further participant has secured a Chair through UoN internal promotion processes (Wharrad).
 Management of staff

Each new member of staff has an Induction Programme that includes some core provision to ensure that key issues are covered in addition to tailored arrangements specific to their post. Balancing staff workloads is a key priority for UoN and has resulted in the introduction of a workload model that has been piloted in a number of Schools and will be implemented across UoN from December 2013. The development of a set of clear expectations for R&T staff at all levels by the SoHS Research Governance Team (2010) fed into the UoN workload model. UoN operates an annual cycle of merit-based promotions. Promotion is open to all staff and recognises research, teaching and university and academic service. Senior academics from the SoHS mentor staff who wish to apply for promotion. The SoCHS (now incorporated into SoM) has run regular promotion workshops for staff over the current REF period. The success of these processes for staff in the UoA is evidenced by numerous promotions during this time, including: four promotions to Professor (Crawford, Drummond, Logan, Wharrad); two to Associate Professor and Reader (Bath-Hextall, Drummond); seven to Associate Professor (Adams, Arthur, Aubeeluck, Edgley, McGarry, Watson, Windle); three to Senior Research Fellow (Almack, Edmans, Goldberg) and one to Principal Research Fellow (Pollock). This has allowed the UoA to retain key staff, thus enhancing the sustainability of its research environment.

ii. Research students

Capacity building and recruitment

The UoA has a dynamic, vibrant and truly international PGR student community studying for MA Research Methods, PhD and taught doctoral (Doctor of Health Sciences, DHSci) programmes. International students make up 68% of our current full-time PhD student cohort and represent 18 countries, including Egypt, India, Jordan, Malawi, Pakistan, Saudi Arabia and Thailand. Additionally, the UoA hosts EU students from France, Italy and Spain. UoN has consistently been in the top two HEIs in the UK for the recruitment of international PGR Nursing students across the current REF period. The vitality and sustainability of the research environment offered is evidenced by the increase in PGR numbers: 142.5 FTE (2012) compared to 52.5 FTE (RAE2008, UoA11 and UoA12), with an increasing trajectory of full-time PGR student recruitment (Table 3) to create a dynamic cohort.

Table 3 – Trajectory of full-time PGR student recruitment since RAE2008					
Year	FTE	Year	FTE	Year	FTE
2008/9	14	2010/1	19	2012/3	27
Consequently, the number of doctoral degrees awarded across the UoA has increased					

substantially (Table 4).

Table 4 – Co	omparison of PGR graduat		
School	Graduations RAE2008	Graduations REF2014	Change from RAE2008
SoHS	11.5	47.79	416%
SoM	12	28.70	239%
Support and	training		

Support and training

All PGR students access central support hosted by UoN's Graduate School (GS), as well as a dedicated Faculty of Medicine and Health Sciences Graduate Centre that offers around 50 specialised training courses covering all aspects of the VITAE Researcher Development Framework. The UoA provides discipline-specific training opportunities for students to discuss methodological and ethical issues, present data and receive constructive feedback from staff and peers, including:

- Doctoral student lunchtime meetings (SoHS) run on average weekly throughout the year;
- *Research Saturdays* (SoHS) run four times a year. Facilitated by a member of the PGR team and a member of professorial staff, these full-day events include student presentations and discussion and are particularly valued by part-time students;



- Journal Club and Protocol Planning meetings (SoM) run monthly for PGR students associated with SoM (previously SoCHS);
- The *Faculty PGR Conference* is an annual event for all PGR students in the Faculty of Medicine and Health Sciences;
- Doctoral Training Funds Both SoHS and SoM provide training funds to support doctoral student attendance at workshops, conferences and other networking events. The GS runs an additional competitive funding scheme to enhance the funding opportunities available.

The outlined opportunities are vital to develop and sustain the cohort effect essential for doctoral students to develop confidence in transferable and critical analysis skills.

Results of the Postgraduate Research Experience Survey (PRES) UNUK 2013 conducted by the Higher Education Academy (Table 4) indicate how successful this UoA is in the development of a vital, engaging and critical student culture. The quality of support provided by the PGR team in SoHS was most recently recognised in 2013 when the Director of Postgraduate Research (Lymn) was awarded a UoN Students' Union 'University Staff Oscar' after being voted the staff member most successful in preparing students for the future following nomination by the PGR student body. Core statements and data from PRES 2013 are shown in Table 5.

Table 5 – Results of PRES UNUK 2013 conducted by the Higher Education Academy					
Section	Agreement with Statement	National	SoHS	Comparison	
Supervision	My supervisors have the skills and subject knowledge to support my research.	90.6%	95.2%	+4.6%	
	My supervisors help me to identify my training and development needs as a researcher.	73.3%	80.5%	+7.2%	
Resources	I have a suitable working space.	76.6%	91.2%	+14.6%	
Research culture	My department provides a good seminar programme.	73.3%	90.2%	+16.9%	
	I have frequent opportunities to discuss my research with other research students.	64.4%	82.9%	+18.5%	
Progress and assessment	I understand the requirements and deadlines for formal monitoring of my progress.	85.0%	95.1%	+10.1%	
	I understand the required standard for my thesis.	79.4%	87.8%	+8.4%	
Responsibilities	My institution values and responds to feedback from research degree students.	59.6%	82.9%	+23.3%	
Research skills	My skills in applying appropriate research methodologies, tools and techniques have developed during my programme.	88.9%	100%	+11.1%	
Overall experience	Overall I am satisfied with the experience of my research degree programme.	81.7%	97.6%	+15.9%	
	I am confident that I will complete my research degree programme within my institution's expected timescale.	80.5%	92.7%	+12.2%	

Alumni relationships

The SoHS extends its involvement with PGR students beyond graduation with an established annual Doctoral Alumni Fellowship scheme (since 2009). These fellowships have enabled former doctoral students to continue their research and write up publications from their theses with former supervisors and other academics to strengthen networks with SoHS. Eight such fellowships have been awarded since RAE2008.

Student achievements

A number of PGR students have been recipients of local prizes (UoN Endowed Dean Moore Scholarship Postgraduate Prize 2011 (Petit-dit-Dariel) and 2013 (Moffatt)), national prizes (RCN Research Society Akinsanya Award for Innovation in Doctoral Studies in Nursing 2012 (Venkatasalu), honorary winner of the Migrant and Refugee Communities Forum's Young Woman



of the Year 2013 (Hadziosmanovic), British Geriatrics Society Miss Eva Huggins Prize 2010 (Goldberg)), fellowships (Rayne Fellowship for Refugees 2012 (Hadziosmanovic)) and scholarships (Lawrence S. Bloomberg Faculty of Nursing Emerging Scholars 2013 (Carter)).

d. Income. infrastructure and facilities

Overview

The Faculty of Medicine and Health Sciences provides advanced research facilities and associated expertise to underpin cutting-edge basic and clinical translational research. For example, its dedicated Clinical Trials Unit and Clinical Research Facility is funded in partnership with NUH. In addition to these facilities, all components of the UoA have developed physical infrastructure to support the intellectual resources of our academic staff and PGR students. This physical infrastructure ensures co-location of early career researchers and PGR students across all the different disciplines in the centre of SoHS and SoM, thus promoting integration of the disciplines, the exchange of ideas and networking opportunities.

Income

For 2008-13 academics in this UoA were applicants on a total of 160 funded grant awards; 121 of these awards were as Principal Investigators (PIs). These grant awards amounted to a total of £29.45M of which £13.99M was received by this UoA. This is a threefold increase (321%) compared with that returned in RAE2008. The vitality and sustainability of our research environment is evidenced by the continuing upward trajectory of research income obtained since RAE2008 (Table 6).

Table 6 – Trajectory of research income since RAE 2008					
Year	Income	Year	Income	Year	Income
2009	£1.71M	2011	£2.33M	2013	£2.96M

The vitality and sustainability of the research environment is further evidenced by the fact that more than half of these PI grant awards have involved collaborations with a diverse range of academics outside of the UoA, including pharmacy, public health, clinical medicine, psychology, biological sciences, economics, business, law, social policy, engineering and English. As a consequence of this multi-disciplinarity, the overall portfolio of funding sources is also diverse and comprises both UK and EU grants. The majority of the funding awarded (62.1%, £8.69M) consists of UK government grants, of which 89% (£7.71M), has been awarded from the National Institute for Health Research (NIHR). This shows a marked increase compared to RAE2008 UK government grant capture (£1.63M, 37.42%). UK charity funding represents 18% of the grant awards, including awards from Cancer Research UK, Action Medical Research, BUPA Foundation, Alzheimer's Society, Health Foundation, Royal Society for the Prevention of Accidents and Institution of Occupational Safety and Health. Grant capture from Research Councils (Medical Research Council, Economic and Social Research Council, Arts and Humanities Research Council) represents 14% of the total grant capture (£1.94M) Again, this represents a notable increase from RAE2008 (£258K, 5.9%). EU and overseas funders account for 3.0% of grant capture, with the majority of this (£342K) originating from EU Government Bodies, again representing a significant increase from RAE2008 (£47.5K, 1.09%). This composition mirrors our strategic priorities to focus on large-scale and EU grants, and 75% of these research awards were associated with the research groups.

Nottingham Impact Campaign

The Nottingham Impact Campaign, launched in 2011, aims to raise £150M in philanthropic support by the end of 2015. As part of this campaign and in recognition of the sustained excellence and importance of this UoA's research, two of UoN's three 'Life Cycle' sponsored events have raised funds to support research themes in this UoA:

 The Sue Ryder Care Centre for the Study of Supportive, Palliative and End of Life Care In 2011 the Vice Chancellor and others (including Seymour and Cox) cycled from John O'Groats to Land's End (Nottingham Life Cycle), raising £250K for the Centre. This has been used to support 3.5 FTE PhD studentships in palliative and end of life care. Students from the UK and Cameroon are currently undertaking research on marginalised groups and resource-poor contexts; improving end of life decision making in acute care, and young carers caring for parents with palliative care needs.

Rehabilitation and Ageing

In 2013 Nottingham Life Cycle 3 saw the Vice-Chancellor and other senior staff (including Walker and Radford) cycle 1,100 miles to raise £256K to support stroke rehabilitation research. This



funding will be used to support a number of funded PhD studentships to sustain the development of academic careers of occupational therapists working in this area and ensure that this research group continues to be the foremost of its kind in the UK.

University infrastructure and investment

As a research-intensive university, UoN has invested heavily in infrastructure to support researchers, including excellent IT and library services, facilities, research grant support, studentships, fellowships, training and high-quality education. Specific examples include:

• Physical infrastructure

Facilities for Research staff - Since RAE2008, the infrastructure for these staff has improved considerably, with purpose-built office facilities constructed for early career researchers and located in the heart of SoHS. All staff have an allocated desk space, individual computing facilities, printing and secure storage. Meeting rooms with telephone, SKYPE and computing facilities enable staff to undertake confidential interviews with research participants. Facilities for PGR students Similarly, in the previous assessment period PGR students were located in an office on the top floor of a separate wing of the hospital at some distance from the core academic research staff. PGR students as a result felt academically and physically isolated from the research environment. Since RAE2008 infrastructure for PGR students has improved significantly, with purpose-built office facilities, including locked storage facilities, constructed in the heart of the SoHS. First-year and final-year full-time students have an allocated desk within the office. Second-year students who are in data collection are provided with storage facilities and hot-desk facilities. High-specification computers are provided for complex data analysis. Hot-desk and storage facilities are also available for part-time students. To encourage integration and promote a supportive environment our MA Research Methods students are based in the same office. The impact of these improvements on the PGR experience is reflected in the results from the Higher Education Academy's Postgraduate Research Experience Survey (PRES) 2013, in which 91.2% of students from this UoA expressed satisfaction with resource provision.

• Policy and practice in relation to research governance

UoN provides substantial institutional support for research activity. The Research and Graduate Services office provides support for research activity both pre-award and post-award, ensuring compliance with legislation, regulation and best practice. UoN has a comprehensive range of policies and procedures, including a detailed 'code of research conduct and research ethics' that outlines procedures for management of research data, lone working, conflicts of interest and research misconduct. In addition to central research infrastructure, both SoHS and SoM are supported by a core research team comprising a Director of Research (DoR), Deputy Director of Research, Director of PGR and Ethics and Research Development Officer. The DoR of both Schools sit on the Faculty Research Committee, the Directors of PGR sit on the Faculty PGR Committee, and the Ethics and Research and Development officers sit on the Faculty Ethics Committee. These Faculty commitments ensure that both Schools communicate regularly to develop cross-school research strategies and stay abreast of all institutional developments.

• Studentships and Fellowships

UoN offers a number of Fellowship opportunities annually, including the 'Anne McLaren Fellowships' and the more recently established (2009) 'Nottingham Research Fellowship (NRF)'. At least one NRF is awarded to each Faculty annually. A number of fully-funded PhD studentships to encourage cross-school and cross-faculty collaborative research are also supported on an annual basis, to which this UoA has successfully recruited. This UoA has had further success in securing competitive UoN PhD studentships for international and EU students (Vice-Chancellor's Scholarship for Research Excellence and, from 2012, the Scholarship for Research Excellence from Brazil). Since RAE2008 this UoA has captured over 20 PhD studentships through these opportunities, thus showing the quality of candidates and the University's commitment to research in this area.

e. Collaboration or contribution to the discipline or research base

Research success for this UoA depends on the delivery of innovative solutions to healthcare problems. This in turn depends on the recruitment and retention of high-quality research staff working in conjunction with researchers at other universities, both within and outside the UK, and frontline clinical staff working within healthcare systems. The vitality and sustainability of our research environment is evidenced by significant ongoing local, national and international collaborations and a number of personal fellowships and awards. Examples of these activities are



detailed below.

National and international collaborations with Higher Education Institutes (HEIs)

Academics in this UoA are actively involved in collaborations with 55 different universities across the UK. Similarly, the UoA has catalogued in excess of 100 collaborations with over 50 international Universities in over 16 different countries (Figure 1). These collaborations have resulted in jointly authored outputs, grant applications and implementation of research outcomes. The contribution of these collaborations is demonstrated by the five impact case studies submitted by this UoA, all of which demonstrate national and international reach and significance. **Figure 1 – Engagement with international HEIs**



Engagement outside the University sector

Academics are also actively engaged in collaborative research projects with organisations outside of higher education, including 13 different healthcare providers at local, regional and national levels. Examples of these collaborations are:

- Local Nottingham University Hospitals NHS Trust;
- <u>Regional</u> University Hospitals Birmingham NHS Foundation, Birmingham and Solihull Mental Health Foundation Trust;
- National NHS Stockton-on-Tees, NHS Redcar and Cleveland, NHS Grampian.

Academics are also actively involved with national charities (e.g. AgeUK, Stroke Association, Child Accident Prevention Trust, National Memorial Arboretum Company Limited), public sector and private organisations (e.g. British Geological Survey, National Offender Management Service, Health and Safety Executive, Viclink, Allergan Inc, 3M Healthcare).

Informing national and international policy

Research within this UoA has resulted in academics being invited to join a variety of policymaking committees both in the UK and globally. Examples of these appointments include:

- HEFCE REF Expert Advisory Group (Cox, Drummond);
- WHO Regional Office for Europe (Leka);
- French government's advisory panel on psychosocial risks at work (Griffiths);
- Scientific Committee of the European Association for Palliative Care (Seymour);
- NICE Maternal Medicine Clinical Standards Group (Spiby);
- DoH/Sainsbury Centre for Mental Health Recovery Policy Implementation Advisory Group (Repper);
- Department of Health A&E quality indicators, Emergency Medicine Workforce (Timmons);
- NICE advisory group on non-melanoma skin cancer (Bath-Hextall);
- Global Stroke Community Advisory Committee (Walker).

Research funding (panel membership and review responsibilities)

Ten academics are members of 15 national funding committees including AHRC (Crawford), ESRC (Seymour) and MRC (Adams), NIHR funding committees including RfPB (Callaghan, Cox, Logan), NCSS (Callaghan), CAC for Nurses, Midwives and AHP (Callaghan, Cox, Logan, Walker) and prestigious charities including Cancer Research UK (Cox), Stroke Association (Drummond, Walker) and Dunhill Medical Trust (Gladman). Thirty academics regularly peer-review grant applications for a variety of national funding committees. The word cloud below (Figure 2) details the key committees and the frequency of our involvement in reviewing. Twelve academics also

Environment template (REF5)



regularly review grant applications for international funding bodies, including those based in Europe (Ireland – Lymn, Timmons; Netherlands – Bath-Hextall, Clegg, Coulson, Standen; Belgium – Clegg, Seymour; Germany – Bath-Hextall; Switzerland – Seymour, Crawford; Sweden - Walker; Finland - Griffiths), Australia (Buchanan, Crawford, Walker), North America (Leka, Spiby) and Asia (Callaghan, Clegg, Gladman).

Figure 2 – Key grant reviewing responsibilities and frequency



Journal editing

Academics routinely undertake peer-review of manuscripts submitted to national and international journals. Additionally, 22 academics serve as editors or associate editors for 35 national and international journals. Examples demonstrating the breadth and depth of these associations include: Journal of Advanced Nursing (Seymour), Clinical Rehabilitation (Drummond), International Wound Journal (Moffatt), Journal of Psychiatric and Mental Health Nursing (Stickley, Winship), International Journal of Behavioural Medicine (Buchanan), Journal of Health Psychology (Standen), International Journal of Evidence-Based Healthcare (Bath-Hextall), Safety Science (Leka), Communication and Medicine (Crawford) and BMC Pharmacology and Toxicology (Lymn). Conference and symposia activities

Academics have presented at international symposia, with a significant number being invited to give keynote presentations. The following are illustrative of the breadth of staff invited to present:

- Callaghan 7th European Congress on Violence in Clinical Psychiatry (2011). Prague:
- Crawford International Health Humanities Network (2010), Nottingham; •
- Gladman International Association of Gerontology and Geriatrics (2013), Seoul; •
- Michail 3rd Biennial Schizophrenia International Research Conference (2012), Florence; •
- Seymour Inaugural International Advance Care Planning Conference (2010), Melbourne; •
- Walker World Stroke Congress (2012), Brazil.

Academics from this UoA also regularly contribute to the organisation of conferences. Examples of our involvement in conference organisation include: Society for Research in Rehabilitation 2013 (Radford); International Conference on Disability, Virtual Reality and Associated Technologies 2012 (Standen); 4th International Lymphoedema Framework Conference 2012 (Moffatt); European Congress on Violence in Clinical Psychiatry 2009 and 2013 (Callaghan).

Awards, prizes and fellowships

The influence and contribution of academic staff within this UoA to the research base of the discipline has been recognised nationally and internationally by more than 20 personal awards, prizes and fellowships, including:

- Member of the Most Excellent Order of the British Empire (Walker, 2012);
- Fellow of the College of Occupational Therapists (Drummond, 2012); •
- American Psychological Association 'Early Career Achievement Award (Leka, 2011);
- British Broadcasting Corporation 'Reach Out Award' (Walker, 2008).

Academics have also been asked to present prestigious annual lectures, including the Princess Margaret Memorial Lecture (Walker, 2010), the Eileen Skellern Memorial Lecture (Callaghan, 2010), the Elizabeth Casson Memorial Lecture (Drummond, 2010) and the FE Williams Lecture, Royal College of Physicians (Gladman, 2011).