

Institution: University of Chester
Unit of Assessment: 4 Psychology, Psychiatry and Neuroscience
a. Overview (25%, combined with b. Research strategy)
<p>This return is made up of staff from the Department of Psychology and colleagues from the Department of Biological Sciences who are engaged in the study of animal perception and behaviour. The two departments have a long and continuing history of working together. Research is focused around three main groups:</p> <p>Health and well-being; brings together our researchers working in the areas of health and of risk and resilience. Areas of especial strength are psychological aspects of cancer care and anti-bullying in schools.</p> <p>The animal behaviour and evolution group includes staff based in the departments of Biological Sciences and Psychology. Researchers within this group use a wide variety of methods to address key research questions in the areas of perception, behaviour and evolution in both animals and humans.</p> <p>Cognition and emotion; research in this group is focused on the recognition of emotion in faces and voices and the lateralised processing of emotion and the effects of epilepsy on cognitive functioning.</p>
b. Research strategy (25%, combined with a. Overview)
<p>Changes over assessment period</p> <p>This is the first return by University of Chester to the Psychology, Psychiatry and Neuroscience panel. In RAE 2008 staff from the Psychology Department and Animal Behaviour group within Biological Sciences were returned alongside staff from other departments to UOA12 Allied Health Professional and Studies and UOA 40 Social work and social policy and administration. Since 2008, there has been a substantial expansion in research activity in Psychology at Chester. A total of seven Psychology and Animal Behaviour staff were returned in 2008. The number of staff returned this time is fifteen, so we have grown substantially as a centre for research.</p> <p>Evidence for the achievement of strategic aims for research during the assessment period.</p> <p>In 2008, the University committed to provide staffing and resources derived from QR (and other central) funding on a selective basis to promote research activity of the highest possible standard and impact, and to ensure that QR funding be deployed in support of those who were responsible for the income. This commitment has been fulfilled. QR monies have been allocated to funding streams which correspond to the UOAs which generated the funding. Staff have been invited to compete for funding against regular calls, ensuring that QR funds are dedicated to supporting high quality research. A total of £214,700 has been disbursed in 32 internal research grants in the areas of Psychology and Animal Behaviour during the assessment period. QR funding has, of course, now reduced substantially and we have re-focused our research strategy in response to this.</p> <p>Current and future research strategy</p> <p>Our research strategy is centred on developing staffing through new appointments and staff development (more on this in section C). This includes increasing honorary appointments to provide an exciting mix of perspectives.</p> <p>Research leadership comes from the Heads of relevant departments (Psychology and Biological Sciences) who are both Professors and from the Professors (Boulton) and Readers (Hulbert-Williams, Fletcher and Smith).</p> <p>In strategically developing our research profile we look to build on areas of strength. This includes</p>

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focusing research around already strong groups and emphasising applied research which matches our existing strengths and fits with the department and University vision (see section on collaborations below). It also means ensuring that research is well-integrated with the other activities of the departments so that these can support instead of compete with research. An example of this is the strategic development of new PGT programmes and third stream activity which are aligned with our areas of research excellence. This allows staff to focus on these areas and contributes to productive communication with users of our research.

The recent introduction of a full workload model in the Department of Psychology will allow research-active staff more research time while other colleagues focus more on administration and teaching. This is combined with other recent initiatives including a research mentor scheme in which each member of academic staff is assigned a research 'mentor' who will provide peer support in strategizing research activity and the development of a research plan. As we look to develop stronger strategic targeting of research and dissemination / impact-building activity, staff within Psychology are now required to produce individual research plans, linked to the overall department strategy, in order to be allocated research time above the basic allocation for scholarly activity.

Strategic oversight of research within this UoA area is via a research committee in the Department of Biological Sciences and Research Strategy Group within Psychology. Senior staff are tasked to lead on specific areas of research development and in Psychology we have appointed a new Departmental Research Strategy and Development Co-ordinator, which includes leadership of the new Research Mentor Scheme (N Hulbert-Williams, Reader).

As a relatively small centre, effective collaborations (see below) are important to create vibrant knowledge communities. Collaborations are built and nurtured with other HEIs and research centres nationally and internationally and we have strong links with local organisations (NHS trusts, police and schools). Staff are supported both from Department funds and also from centrally-administered and competitive funds (such as the International Research Excellence Awards Visiting Fellowship scheme funded under the Santander Universities arrangements) with e.g. travel costs to develop and maintain research links.

Our aim is to develop not just the quantity but also the quality and impact of our research. Research-active staff are supported and encouraged to submit to higher impact journals and we continue to develop other and innovative ways of disseminating our research such as through use of different forms of social media. Development of external funding applications is being informed by looking at future strategy documents for relevant funding agencies and aligning our research plans on these. The University has a dedicated research office who advise on sources of funding and provide full support in preparing and costing external funding bids.

Research groups

There are currently three main research groups or themes. We expect this number to increase over the next five years. As the number of active researchers within Psychology grows, we anticipate that our research groups will break into a slightly larger number of groups centred around the areas of strength and specialism which are already evident in our work. Our research groups engage in a timetable of meetings and activities throughout the year including 'journal clubs', writing days etc.

Health & well-being.

We have a thriving Health and Well-Being Research Group which brings together our researchers working in the areas of health and behaviour and risk and resilience. Of especial note is our work on psychological aspects of cancer (led by N. Hulbert-Williams) and on the prevention of bullying and promotion of social development in schools (led by Boulton). The research undertaken by members of this research group is generally very applied and makes use of our strong links with practice. Other key areas of health in which we are researching include reproductive health, eating behaviour and interactions between health professionals and service users. Identifying risk and

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promoting resilience is a common theme of our work in the areas of mental health as well as in schools and families.

The staff associated with this group returned in this REF are: Boulton, Bramwell, L. Hulbert-Williams, N. Hulbert-Williams, Murray and Wilkinson as well as the early career researchers, Carroll, Clucas and Stewart. Other early career researchers associated with this group who have recently joined the department and who we anticipate will be returned in the next REF include Tosh, Kirkham and Yilmaz.

We have 6 PhD students currently associated with work being undertaken by members of this group. One of these is funded on a student bursary funded jointly by the University of Chester and Countess of Chester NHS Trust. Members of the group have been involved in several successful bids for research funding during the census period, including both internal research monies (a total of fifteen research grants totalling £56,647) and external funding including £6,460 from Breast Cancer Care and £10,000 from the NSPCC.

This is an ongoing area of development and we anticipate future growth which will allow this research group to become two or more groups in coming years, whilst maintaining the benefits of cross-fertilisation of ideas.

Animal behaviour and evolution

Researchers within this group use a wide variety of methods to address key research questions in the areas of behaviour and evolution in both animals and humans. This includes applied research into pain perception and stress in a variety of animals, behavioural studies of both captive and free-ranging primates, studies of evolutionary changes in human social behaviour and using evolutionary approaches to understand modern-day human behaviour. The staff associated with this group included in the return are Nelson, Roberts and Smith, and the group also has a number of honorary staff associated with it including A. Roberts, Santorelli and Schaffner as well as two current research students. Staff associated with this group have attracted substantial internal research funding (seventeen grants totalling £119,027) as well as external funding.

Cognition and emotion

The Cognition and Emotion Research Group is a dynamic and prolific team, which has produced a number of high level publications. It primarily includes Damjanovic, Rodway, Schepman and Wilkinson but also has contributions from other members of staff on specific research projects. The group was joined in Autumn 2013 by new appointment, Wright-Whelan. The group has also obtained research funding (nine internal research grants to a total value of £35,847 plus external funding for research activity totalling £9,000 across three grants) and developed many international research links. Typical projects which have produced published work include the perception of emotion in faces and voices; the lateralisation of emotion and the relationship between language and emotion. The group has also carried out research into the applications of cognitive and emotional effects in areas such as autism, epilepsy and the impact of new technology. The group is continually looking to add further knowledge to this general area, attract further research grants and widen their international research links.

c. People (25%)

including:

i. Staffing strategy and staff development

Staff are at the core of our strategy for developing the department. The expansion of the Psychology Department means that we have recruited a number of new staff within the census period so that the majority of those returned to this REF - twelve in all - have joined us since the last RAE. Newer appointments also include a number of recent PhD graduates who, whilst we have decided not to return them in this REF, we fully anticipate will help to drive forward the dynamic development of Psychology research in the next few years. In making these appointments, we have looked to recruit research-active staff whose research will complement our existing areas of strength to build active research groups. New staff have joined us from a number

of HEIs including University of Liverpool, UCL, Bangor University, University of Oxford, University of Bradford, University of Manchester, University of Dundee and Pennsylvania State University.

Our strategy is, as far as possible, to create substantive or longer term posts which allow staff to develop their careers effectively with us. The University has a transparent promotions procedure which allows us to reward and promote active researchers and this is exemplified in recent internal promotions to Professor and Reader within the Department of Psychology. Where short-term visiting lecturer contracts are available these are used, where possible, to allow our PhD students or recent PhD graduates the opportunity to gain teaching experience to support their career development.

The Department and the University are strongly committed to the development of all staff of the University. This was recognised externally by the recent award to the University of the HR Excellence in Research Award which demonstrates a commitment to implementation of the Concordat to Support the Career Development of Researchers. The University has established (through the Research Committee) a forum for early-career staff to enable networking across subject and discipline boundaries and to help identify and address common problems and allow issues to be raised at policy-making level.

All new academic staff of the University are supported through an accredited programme leading to Fellowship of the Higher Education Academy. A particular feature of the Chester programme is that the compulsory core modules provide developmental support, helping and encouraging newly appointed staff to understand the demands and opportunities of research supervision. A further, optional module is available that develops skills in supervision to an even higher level.

The University of Chester supports activities promoting equality and diversity. There is a long-established annual University Diversity Festival to which all staff and students are invited and to which staff in Psychology have contributed sessions. The University has a Disabled Staff Group that has been active since 2007 and provides a safe and supportive environment in which to discuss issues relating to disability. The Human Resources Department monitor regularly for equality issues as part of the recruitment process for staff and funded research students, and the University is currently working towards an Athena Swan award.

The University's Annual Staff Conference is an all-day event held each year. Research is featured within the conference through several parallel sessions which showcase successful projects, opportunities to develop impact, sharing of good practice in grant applications and management, collaborative initiatives, and understanding good research governance. The University runs a training programme on PGR supervision. HR has a specific section on training events recommended for researchers.

The probationary and induction programmes are interlinked and ensure that all new members of staff are introduced to a wide range of facilities and policies. These include access to colleagues from the Research and Knowledge Transfer Office (who can provide assistance in applying for grants and setting up R&D contracts) and to colleagues in the Graduate School who can help to advertise research projects and to interview and admit potential research students. Every new member of staff in Psychology is assigned a mentor and will meet regularly with the HoD during their probationary period.

Every member of staff has a performance and development review annually with the Head of Department in which research activity and personal development to support this for the coming year is discussed and agreed. The department budget is used strategically to develop staff research skills and networks, for example, in the academic year 2011-12 academic staff requested department budget support for attendance at 10 UK and 2 overseas conferences and all were supported (none refused). There were also requests for three 3 external research methodology training events, all of which were supported (none refused).

The excellent staff development we offer means that the few staff who move on from posts at

Chester have gone on to work at prestige institutions. For instance, one of our PhD graduates who then had a one-year lectureship with us went on to a post as a research fellow University of Plymouth (working with primate behaviour group). Another one-year lecturer post went on the research post at University of Stirling.

ii. Research students

Training and support for PGR students is a shared responsibility at Chester, between the Graduate School (with responsibility for providing generic training and support) and the subject department which provides supervision and specialist training and support. PGR students are offered face-to-face training sessions by the Graduate School, supported by a Moodle site providing on-line access to training materials written and contributed by academic staff from across all subjects and faculties. Students experience both a central University induction, and a local induction within the department, so that they have a full understanding of the regulations and services provided by central support departments as well as of the local support staff and facilities in the building where they are studying. All students undertake a skills audit to help them to identify their training needs. A number of postgraduate modules on research methods and skills are available within the Psychology Department and students can also, if appropriate, access modules from other departments across the University. There are also a number of seminars and training sessions specifically designed for PGR student needs. Students who will be involved in teaching are expected to undertake specific training to prepare them for this activity, and may, if they wish, undertake modules leading to Associate Fellowship of the Higher Education Academy, which provides a good basis for future applications for academic posts.

Every student is supported by a team of at least two approved supervisors, one of whom is designated Director of Studies, and who has supervised at least one student to successful completion of the award. Supervision meetings take place frequently, with at least one meeting per month being recorded with outcomes and targets. Following a probationary period of 6-9 months, student progress is reviewed formally. If the student's registration is confirmed at the probationary review, a termly meeting of the full supervisory team reviews progress with the student subsequently and a Progress Review (chaired by an independent academic staff member) reviews progress against objectives and expectations on an annual basis. Students must submit a report, give a seminar and attend an interview before their upgrade from MPhil to PhD can be confirmed. There is a similar rigorous process to consider applications to transfer to 'writing up' status. Each Faculty has at least one Faculty PG tutor who is available to see PGR students by appointment and to resolve any issues or questions they may have. Faculty tutors represent their Faculty and its students at the regular Graduate School meetings and also represent the Graduate School as appropriate in their Faculty.

Research students are well-integrated into the life of the department. They are part of the research groups, attend department research seminars and are an active part of department research activities such as writing days.

The University recognises the value of conference participation for all PGR students and has established a fund to provide a contribution to conference attendance. Each year applications are invited and all successful applicants are provided with financial support. PGR students within Psychology are supported by regular department research seminars and an annual Faculty Research Student Conference.

Facilities. A new base room for PGR students has recently been established within the Psychology home building with bookable desk spaces & full access to IT and printing for PGR students. All PGR students have full access to department lab spaces and equipment.

Teaching experience. Career development for our PGRs is supported through opportunities for paid teaching experience within the department and this is supported by University-run training sessions specifically for new VLs.

Paid research posts – PGRs may be given the opportunity to work as paid RAs on research and consultancy projects. So, for instance, one of our self-funding PhD students has been given short-term research assistant posts on projects funded via the internal QR funds and money awarded by an external charity for a research review project.

d. Income, infrastructure and facilities (25%)

The University Library subscribes to over 1,000 printed journals and more than 13,000 electronic journals which can be accessed online. It has approximately 260,000 printed volumes in its collections and books can be borrowed from any of the libraries at the University's different sites. The collections also include 15,000 e-books which are core academic texts plus access to many other online materials. At the main campus library there is 24/7 access to computers, printing and quiet study space throughout the year and extended access to all collections across all sites is provided during term-time and at peak periods. The library is characterised by the provision of specialist teams of subject librarians (e.g. a team of five for the Faculty of Social Sciences within which Psychology sits) who provide exceptional support in ensuring access to all the specialist sources we require for our research.

Research facilities within the Psychology Department. Psychology is fortunate to have one FT & one PT technician working exclusively within the Department, who have been joined for 2013-14 by an apprentice technician. All lecturing staff have their own choice of computer provided on their desk for their personal use (most have a PC but some prefer macs or laptops). The Psychology Department owns a number of laptops for staff loan and the University library has a large stock of laptops available for loan by PGRs. All staff, research assistants and postgraduates have access to the University IT network 24/7 either on campus or via remote log-in. All computers are connected to the University network that allows users to access such software as Microsoft Office (Word, Excel, PowerPoint, Access), SPSS, e-mail, and access the internet and the Library Catalogues. Additionally, there is much specialist psychological software available for use such as Superlab, E-Prime, Biopac, FaceGen modeller, Poser, Sniffy, Neurobs, emWave, Formic Optical Mark Reader, and other experimental software and specialist statistics packages including mplus, AMOS.

The Psychology Department has exclusive use of eleven research labs, interview rooms and computer suites, two observation suites and two video-processing rooms. We own a range of other research equipment including numerous recording devices including cameras, video cameras, time-lapse recording, telephone interview recorders, voice recorders, physiological monitoring equipment and a range of psychometric tests.

Laboratory facilities within Biological Sciences are excellent, including dedicated endocrine, biochemical and molecular biology laboratories containing Dynatech microplate spectrometer, BD FACS Canto Flow Cytometer, Nikon Eclipse 2000-U Fluorescence Microscope system, Bio-Rad ChemiDoc XRS molecular imager with fluorescence and chemiluminescence analysis capabilities. The Biology building also houses a temperature and humidity controlled amphibian lab currently equipped to house 120 *Xenopus laevis* funded by a NC3R three year project grant (of £324K). A further invertebrate / aquatic lab houses small invertebrates and fish.

Governance. All research is subject to ethical approval and progress on funded research is carefully monitored by the Research and Knowledge Transfer Office. This is in addition to any research oversight specifically required by external funders.

e. Collaboration or contribution to the discipline or research base (25%)

Staff working in the Department of Psychology and in the Animal Behaviour group within the Department of Biological Sciences during the census period have made a number of important contributions to the discipline through reviewing for national and international journals and

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participation in **Journal editorial committees** including: Journal of Reproductive and Infant Psychology; Europe's Journal of Psychology; Psycho-oncology; Applied Animal Behaviour Science; Animal Behaviour. They have also reviewed for **Funding bodies** including ESRC; BUPA; Pain Relief Foundation; Swiss National Science Foundation; BBSRC; National Science Foundation; Barts and The London Charity; NIHR. They have acted as **external examiners for PhDs and professional doctorates** at Universities including LJMU; University of Western Sydney; North West University, Vanderbiljpark Campus, South Africa; University of Wolverhampton. They have been **invited** to give a number of **research presentations** by organisations including: BRI Hospital, Bristol; British Society of Audiology; Otto-con-Guericke University, Germany; University of Durham; St Andrew's University; Clatterbridge Cancer Centre; Queen's University Belfast; University of Sydney; Aberystwyth University; Annual Neuroscientific Summer School, Madrid; University of Oxford; University of Roehampton; University of Essex; British Science Festival; Concordia University, Canada; Royal Manchester Children's Hospitals; Simon Fraser University, Canada.

Our **Membership of academic bodies** includes the Experimental Psychology Society (members need to be proposed by another member); a number of Associate Fellows of the BPS; Ethics Chair for Association for the Study of Animal Behaviour; Neurobiology convenor for Society for Experimental Biology. Our participation in **external committees / groups** includes British Psychosocial Oncology Society (Chair); BPS Special Interest Group for Oncology & Palliative Care committee (2008-2010); National Cancer Research Institute Primary Care / Psychosocial Oncology Clinical Studies Groups; Steering group for Department of Health Cardiac Revascularisation PROMS Pilot Project; International Psycho-oncology Society Research Committee; General Assembly Member for BPS Psychology of Women Section. The **Conferences / symposia organised** include British Psychosocial Oncology Society (BPOS) Annual Conference 2010; BPOS Student Members Conference 2012 Symposium on Social Media at BPS Annual Conference 2013; Symposium on 'Mechanisms and functions of intraspecific variation: from genes to behaviour' at Society for Experimental Biology Conference, Valencia, Spain 2013. The **Prizes / awards** we have been awarded include the BPS Qualitative Methods in Psychology Section Prize; Research Institute for Health and Social Change Prize; BPS Psychology of Women Section Student Prize.

Collaboration. Effective collaboration with other HEIs and research centres and with external organisations is an important hallmark of our research. Our collaborators at other **UK HEIs** are many and include: Bangor, Southampton, King's College London, London Metropolitan, Stirling, Queen's Belfast, St Andrew's, Cambridge, UCL, Edinburgh, Bristol, Plymouth; Oxford; Dundee; Liverpool; Manchester; Goldsmiths College, Surrey, Keele, Stirling. Our **International collaborations** include collaboration by N. Hulbert-Williams with colleagues at University of Mississippi; CanTeen (an Australian national support organisation for young people living with cancer); Northern Health (part of the Australian public health service); University of Manitoba, Canada. Also collaboration by Clucas with colleagues at University of Oslo, Norway, by Rodway with the Educational Psychology Service, Denmark, by Roberts with VU University, Amsterdam, by Smith with University of Veracruz and by Schaffner with Punta Laguna Natural Reserve, Mexico.

We have a number of effective **collaborations with the NHS Trusts** including Liverpool Women's Hospital; Walton Centre Pain Clinic; Countess of Chester NHS Trust; Clatterbridge Cancer Centre; Aintree Hospital; Cheshire West NHS Trust and North Wales Cancer Treatment Centre. We also work collaboratively with **charities** including Breast Cancer Care, Breast Cancer Campaign, and the Durrell Wildlife Trust as well as with Chester **zoo**. Our collaboration with **industry** includes research with Telefonica mobile phone company (Spain) (Roberts).