

<p>Institution: University of Chester</p>
<p>Unit of Assessment: 4 Psychology, Psychiatry and Neuroscience</p>
<p>a. Context</p> <p>This return includes staff from the Departments of Psychology and Biological Sciences. Staff in both Departments have a strong commitment to the University of Chester mission to serve and improve the communities within which we live and work and this has always shaped our research. As our research activity has expanded since RAE2008 we have adhered to this mission of applied research and strong links with users.</p> <p>Our research groups engage with a range of user groups. Several projects relate to schools, including work on bullying (Boulton, Murray and Lloyd), cross-age teaching (Boulton) and symbolic development (Kirkham). This work directly informs practice within schools and also engages with charities such as the NSPCC. The work has obvious applications in improving well-being of children and also their learning. Because it is conducted in collaboration with schools there is immediate dissemination and benefit to the education community, whilst engagement with schools nationally and internationally is promoted through wider dissemination of the research.</p> <p>We also have a range of projects relating to health care provision. This includes work on depression (Bramwell), communication in health care (Carroll, Clucas), Psycho-oncology (N Hulbert-Williams, Bramwell, Wilkinson), PTSD (Bramwell, L Hulbert-Williams), weight management (N & L Hulbert-Williams), psychological problems in adults with intellectual disability (L Hulbert-Williams) and early detection of severe and enduring mental illness (Stewart). Again, because the work is conducted in collaboration with local care providers within NHS Trusts (e.g. local oncology services) and charitable organisations (e.g. hospices) there is, as with our schools research, direct engagement with users, who often provide the impetus for our research. A good example of this is that a local NHS service initiated and part-funded a joint project with us on psychosocial needs of haematological cancer patients – an under-researched patient group with potentially very different disease and treatment experience to other cancer patients. The health-care research we undertake directly benefits patients and service users, improving psychosocial and physical well-being and recovery. This is mainly achieved by engaging with relevant health care professionals via conferences and staff training events. We also work closely with various charitable organisations and are fostering links with the Department of Health such that our ongoing work will have direct policy impacts. The benefits arising from this research are improved staff training and improved patient (and family) psychosocial well-being and recovery.</p> <p>Our research into cognition and emotion engages with users in health care (e.g. Wilkinson's study on patients with epilepsy, Damjanovic's study in patients with schizophrenia) and education. The group are also developing new research areas of applied research which, for example, look at applications in police interrogation (Damjanovic, Wright Whelan).</p> <p>Our research into animal well-being is used by veterinarians working with fish; fish farmers; pets' organisations; anglers; animal protection and welfare organisations. Most notable in this area was work conducted into pain, perception and well-being in fish by Sneddon, who has recently left Chester. The research findings are relevant in a very wide range of contexts. Engagement with users is via the media and by participating in advisory bodies and commissions. This in turn drives future research ideas. Benefits – apart from those to fish - are that better husbandry improves productivity and better management of animal models in research improves research outcomes.</p> <p>In the research being undertaken into primate behaviour by our salaried (Fletcher, Nelson, Smith) and honorary staff (Schaffner, Santorelli, A. Roberts) we have developed specific relationships with conservation areas in Rwanda and Mexico and with zoos. These allow us to work collaboratively and in response to the challenges they are facing and to feed the research directly back into practice. Publication and dissemination via conferences / networks allows wider dissemination of good practice internationally. A key aspect of some of this work is research that applies research with wild populations to management of captive animals. This produces benefits to wildlife as well as the economic benefits to communities of effective eco-tourism and to zoos of well-kept animals which attract visitors. Research applying evolutionary theory to communication via new technology (Roberts) engages directly with companies delivering these services (e.g. mobile phone companies). Wider dissemination of this research, including engagement with news and current affairs programmes internationally, ensures that this research also benefits the wider community as we all engage with the potential impact on emotional well-being of this new technology.</p>
<p>b. Approach to impact</p>

We ensure the real-world impact of our research by working directly with end-users in the development and execution of our research, which is often very applied in nature. We are realistic that impactful research is often best achieved by research which involves collaboration across disciplines and institutions and staff are encouraged to build and maintain such collaborations through allowance of time and funding for travel and study visits. We also aim to disseminate effectively with an especial emphasis on engagement with local users and with relevant national and international committees. We encourage dissemination and impact through effective use of new methods of social communication (e.g. Twitter).

Impact begins with recruitment of staff engaged in high quality applied research who are already working in areas which link to or complement our existing areas of strength. In this way we ensure the continuation of a research culture with a focus on making a real-world difference. The development of impact is supported by funding dissemination activity and consultation with users and by releasing staff time for this purpose. Funding comes from Department budgets but also, on a University-wide basis, 20% of QR funding is allocated to support impact and all internal research grants are now required to demonstrate impact.

Our engagement with the wider community is well supported by the University's Corporate Communications service and our staff regularly work with this team. We regularly contribute to events which aim to bring research to a wider audience such as the British Science Festival, events at the London Science Museum, and the Shift Time Festival of Ideas (supported with time and funding by the Department).

Some illustrative examples of how research has generated impact: **Schaffner** (previously employed and now honorary professor) supervised a University-funded PhD project which identified problems with male aggression in captive spider monkeys. Research findings showed this was because the practice of moving males to new zoos for breeding was based (incorrectly) on practices with matrilineal species of primates, whereas in spider monkeys females are the dispersing sex. The team presented a plan to the European Studbook Keeper for *Ateles* to move females and not males when managing the population across different zoos. Although no formal adoption of the practice has yet been announced, some zoos are changing their practice. This was the case at Chester Zoo as this year they relocated two females to other zoos for the first time.

Stewart's work on the EDIE-2 trial on early intervention for psychosis began before she joined us but she has been supported and encouraged to maintain this collaboration. EDIE-2 showed that CBT plus monitoring of mental state (i.e. no medication involved) can reduce severity of psychotic-like experiences and internalised stigma for people at high risk of developing psychosis. Findings related to EDIE-2 have been disseminated to scientists with six papers to date (three published, three in press), the participants themselves, NHS trusts and mental health and patient interest groups, and are currently informing rewriting of NICE guidelines on intervention for people at risk of psychosis. This is a good example of the effectiveness of our strategy of employing staff engaged in research with impact and supporting them not only in their ongoing research but also with the ongoing work of ensuring the dissemination and impact of their research.

Several staff are using new social communication methods to reach research users. For example, a recently-appointed member of the Psychology Department (**Tosh**) is the creator and manager of a 'Protest Zucker' Facebook page which documented a combined activist and academic campaign challenging psychiatric intervention with transgender children and included sharing research conducted by Tosh. **Clucas'** work on health professionals' interactions with the Deaf was made available to British Society for Audiology (BSA) members via an online 'Lunch and Learn' e-seminar. Such training events are known to change healthcare professional's practice over time.

Our work in the area of Psycho-oncology (led by **N. Hulbert-Williams**) could provide many examples of impact. For example, we were approached to collaborate on an evaluation of the 'Living Life after Treatment' programme for cancer survivors at a local hospital and this work was supported from an internal research grant. The programme has now been modified, including the addition of a psycho-educational session facilitated by a member of the Psychology Department (N Hulbert-Williams). This work is now producing publications and forming the basis for further research, with another internal research grant recently awarded to further this work. Through disseminating these findings, our team have also been approached by a major national charity (Breast Cancer Care) to advise them on their national peer-support and survivorship programmes. Broader sharing of this and other research in the area of psycho-oncology is also achieved by N. Hulbert-Williams' involvement in national and international committees for organisations such as

the National Cancer Research Institute, British Psychosocial Oncology Society, International Psycho-Oncology Society, BPOS and IPOS and links with charities in the UK and abroad.

c. Strategy and plans

Moving forward, we will continue to build on our strong existing links (e.g. with health care providers, charities, wildlife conservation organisations etc.) and to build new links with user groups and stakeholder organisations. Our strategies for the future development of our research groups include an emphasis on research with strong user engagement. We are also looking to develop greater 'reach' through more strategic engagement and through wider user dissemination e.g. through use of new social communication media. Staff will continue to be supported with time and funding for these activities.

Our approach is not simply about seeking out opportunities to demonstrate impact but also training our staff to understand the importance of impact and to integrate this into their work from the earliest conception of research ideas. This change in culture is being supported by our new Departmental Research Strategy and Development Co-ordinator. Our regular staff development events on building a research profile also address the development of impact and we have recently funded a senior member of staff to attend a national one-day conference on this which he will disseminate via the next Psychology Department away-day. Staff presenting their research in the Department seminar programme will be asked to comment on the impact of their research and how this is being promoted. Plans for generating impact also feature heavily in the Research Strategy Plans that each research-active member of staff is required to develop (with help from their Research Mentor); this information will be regularly evaluated by the Departmental Research Strategy Group with a view to monitoring progress and identifying opportunities to improve the flow from findings to impact. All members of staff have an annual personal development review and impact will be specifically addressed in this.

We also recognise the importance of giving key staff time and other support to broaden their involvement in strategic organisations, for example, N. Hulbert-Williams is allowed time to participate in the International Psycho-Oncology Society (IPOS) International Research Committee so that Chester is the primary UK institution for work that originates through this group.

Any tender for funds to support research activity, whether at Departmental or University level, will need to address the potential impact of the research and how impact will be promoted. Reviews of such grants address whether goals and targets relating to impact are being met. University-wide, applications for Chairs and Readerships now need to show evidence of research impact and, in line with our University aims and mission, applicants for promotion to Senior Lecturer 1 & 2 will also be expected to reflect on the impact of their research.

d. Relationship to case studies

Our departmental approach is to create and maintain strong links with research users, to support this with time and funding and to prioritise internal research funds for high quality, high impact research. The creation and maintenance of strong links with users is exemplified in the case studies presented. For example, Sneddon has been supported to participate in a number of key committees (e.g. the UK Government Animal Procedures Committee) and Boulton was supported to directly engage with local educational users through public events, such as his workshop on school anti-bullying policies hosted by the University on 14th June 2013. University support for high quality and applied research is evident in the allocation of competitive research funds such as the small grants allocated to Boulton for bullying-related projects in 2009 (£4,625), 2010 (£5,000) and 2011 (£4,000) and to Sneddon for projects relating to fish and animal welfare in 2010 (£7,500), 2011 (£5,000) and 2012 (£3,000).

By recruiting staff with a good 'fit' to existing research and building stronger and more focused research groups we are ensuring that good practices in user engagement are embedded in the culture of the relevant departments and are a constant even when staff move on to jobs elsewhere. So, for example, Boulton is actively collaborating with colleagues to develop a strong collaborative research programme in school-based wellbeing (e.g. with Murray, as evidenced in publications; Tytherleigh as evidenced in the award of an internal research grant). Although the main researcher featured in one of our case studies (Sneddon) has now moved to a new post, the collaborative research she established with Smith, Hosie and Coleman (evidenced in joint internal research funding awards in 2011 and 2012) means that this applied research on animal welfare continues within the team at Chester and so ongoing impact will continue to be achievable.