

**Page 1 – General Information**

<b>Project Code</b>	TSAB02
<b>Partner University</b>	Teesside University
<b>Faculty/School/Department/Research Centres</b>	School of Health and Social Care/Centre for Rehabilitation, Exercise and Sport Sciences
<b>First supervisor</b> Please provide name and weblink	Dr Samantha Harrison  <a href="http://www.tees.ac.uk/sections/research/health_socialcare/staff_profile_details.cfm?staffprofileid=U0030582">http://www.tees.ac.uk/sections/research/health_socialcare/staff_profile_details.cfm?staffprofileid=U0030582</a>
<b>Second supervisor</b> Please provide name and weblink	Professor Denis Martin  <a href="http://www.tees.ac.uk/sections/research/health_socialcare/staff_profile_details.cfm?staffprofileid=U0022990hy53">http://www.tees.ac.uk/sections/research/health_socialcare/staff_profile_details.cfm?staffprofileid=U0022990hy53</a>
<b>Third supervisor</b> Please provide name and weblink	Dr Jon Robinson  <a href="http://www.tees.ac.uk/sections/research/health_socialcare/staff_profile_details.cfm?staffprofileid+U0023837">http://www.tees.ac.uk/sections/research/health_socialcare/staff_profile_details.cfm?staffprofileid+U0023837</a>
<b>Fourth (external) supervisor</b>	
<b>External/industrial supervisor</b>	
<b>Which of the supervisors listed above is an early-career-researcher</b>	Dr Samantha Harrison
<b>Contact details for project for informal applicant queries</b> Email address	Dr Samantha Harrison  <a href="mailto:S.L.Harrison@tees.ac.uk">S.L.Harrison@tees.ac.uk</a>
<b>DTA Programme: Please delete as necessary which DTA programme this project relates to:</b>	DTA Applied Biosciences for Health
<b>Project title</b>	The effectiveness of Virtual Reality (VR) for management of persistent pain



Co-funded by the Horizon 2020 programme of the European Union

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**Page 2 – Project Description**

<p><b>Scientific Excellence (500 words)</b></p>	<p>Virtual Reality (VR) has been in use for relief of acute pain in burns, dentistry, wound debridement and post-operative pain for around 20 years. A key mechanism is distraction facilitated by immersion in the virtual environment.</p> <p>More recent studies have begun to explore the use of VR in the management of persistent pain. This is more challenging because of the complex interplay of biological, physical, emotional and social mechanisms. Within self-management of persistent pain, distraction is recommended to help manage pain and flare-ups of pain. There is emerging evidence that VR methods may help reduce pain in the short term for people with persistent pain. The project plan will give clear direction to the student while allowing appropriate space for the student to develop their own ideas to facilitate ownership of the project.</p>
<p><b>Aim (400 words)</b></p>	<p>The project lies within the context of the effect of VR methods on the perception of pain in people living with persistent pain. The working hypotheses are that VR will change their perception of pain, and that there will be differences between different VR applications.</p> <p>The specific methods will be developed by the student. The area lends itself to experimental methods comparing outcomes following the application of different VR applications. It may be appropriate to compare effects against non-VR methods of distraction and control conditions.</p> <p>It is also possible that the student could incorporate qualitative methods to explore the user experience of VR applications and opinions on how VR can be incorporated into self-management.</p>
<p><b>Strategic Relevance (300 words)</b></p>	<p>The project links two major areas of strategic importance - digital health and self-management of long term conditions, of which persistent pain is one of the most prevalent and costly in human and economic terms. The project is of strategic relevance to our work in the Centre for Rehabilitation and</p>



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	<p>Exercise Sciences, with close links with our involvement in the EU Interreg Virtual Reality for Health project.  <a href="http://www.nweurope.eu/projects/project-search/vr4rehab-virtual-reality-for-rehabilitation/">http://www.nweurope.eu/projects/project-search/vr4rehab-virtual-reality-for-rehabilitation/</a></p>
<p><b>Interdisciplinarity and fit with DTA3</b></p>	<p>Persistent pain is a common in all age groups and particularly disabling in older people. The project brings together expertise in rehabilitation and digital health.</p>
<p><b>Industrial Relevance (300 words)</b></p>	<p>There are potential opportunities with partners on the VR4Rehab project, which will be ongoing during the duration of the PhD. The VR4Rehab project will bring together SMEs from across the North West Europe region to stimulate the development of VR products for rehabilitation. Given that Teesside University is leading the pain management theme within the project, there is strong potential to facilitate the student's collaborative opportunities.</p> <p>The VR4Rehab partners from academia and clinical practice from across the North West Europe region provide direct opportunities for collaboration.</p>
<p><b>Economic and Societal Impact (300 words)</b></p>	<p>Persistent pain has huge human and economic costs across the EU. Figures suggest that around 100 million people experience persistent pain to the detriment of their physical and mental health and general well-being. These figures do not include their friends and family members whose lives are also affected. Persistent pain is linked with around half of all of all days lost from work with the total economic cost of poorly managed pain reaching to 2% of GDP across the EU.</p> <p>Self-management is seen as a key part of management of persistent pain. The project will directly inform the use of a technological innovation that has the potential for a wide uptake as part of self-management of persistent pain.</p>



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**Page 3 – Admission Requirements**

<p><b>Specific Admission Requirements</b> Detail any subject specific degree qualifications or disciplines, relevant skills, experience</p>	<p>Applicants should hold or expect to obtain a good honours degree (2.1 or above) or Masters level qualification in a health related or social science subject. The successful applicant will have a demonstrable understanding of self-management of chronic pain and will have experience in recruiting and collecting data from people.</p>
<p><b>Minimum IELTS score</b></p>	<p>The standard test is a valid UKVI-approved IELTS test, showing your English language level at 6.5 overall, with no individual score lower than 6.5</p>



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