Unit-level environment template (REF5b)

Institution: Bath Spa University

Unit of assessment: UoA 4: Psychology, Psychiatry and Neuroscience

Section 1. Unit context and structure, research and impact strategy

Context and structure

The Psychology unit at Bath Spa University (BSU) is underscored by international excellence and successes in applied Health and Cognition research. This success is demonstrated through major funding awards, research which impacts upon individual, organisational, political, and societal spaces, cross-disciplinary networking and research, and dissemination through strategic and impactful public engagement. The portfolio of work within the unit is driven by applied Health and Cognition themes, which are housed within the Psychology Centre for Health and Cognition (PCHC).

Significant and strategic investments have meant that Psychology at BSU moved from a non-submitting, teaching-focused unit in 2014, to one which not only has research excellence, but also supports staff development and Early Career Researcher (ECR) growth, has an ever-increasing Postgraduate Research (PGR) profile, and has made significant investment in physical estates infrastructure and equipment. We have also significantly increased research funding from GBP0 in the REF period to 2014, to Principal Investigator in over GBP400,000 worth of research awards, and have two internationally leading Impact Case Studies which include impactful public engagement.

The PCHC comprises two separate but interrelated clusters. The applied Health cluster, run by **Ravalier** and **Wainwright**, has a focus on applied health and wellbeing research. Most work done here therefore seeks to provide support to important stakeholders such as for employee stress, mental health and wellbeing (**Ravalier, Wainwright, Walsh, Vitale**), return to work following periods of sickness absence (**Wainwright, Walsh, Thomas**), mental health and wellbeing in vulnerable populations (**Vitale, Bengry, Yousaf, McGuire-Snieckus, Wadeley**, **Sutton**), and those experiencing chronic pain (**Walsh, Wainwright**). The Cognition cluster, run by **Jones** and **Etchells,** aims to investigate the mechanisms behind a range of human behaviours from basic learning processes and our understanding of memory (**Markopoulos, Kinloch, Janik-McErlean, de Sousa, Jones**), as well as the impact video games (**Etchells**) and other social processes (**de Sousa**) on cognition. The interests of many researchers also span the two clusters, with senior researchers such as **Thomas**, and ECRs such as **Paulo** and **Pike**, regularly engaging in this cross-disciplinary work. In particular, this work focuses on forensic psychology and real-world applications of cognitive neuroscience.

The PCHC sits firmly within university-wide research strategies. The unit delivers impactful research and public engagement at a local, national, and global level (Institutional Environment Statement, IES 2.1 - 2.5) - through social engagement, collaborative, and/or interdisciplinary research (IES 2.3). The remit of the PCHC fits within two university-wide Research Centres due to involvement in interdisciplinary projects and public engagement (Centre for Cultural and Creative Industries), and transpersonal and co-creative approaches to study (TRACE).

Research Strategy

Following the 2014 non-submission, a series of strategic decisions were made to ensure that Psychology was returned in 2021 as a Centre for Excellence in applied Health and Cognition research. The Psychological Research Group was established in 2014, and this upgraded to the PCHC in 2018, in order to reflect the growing excellence of research and critical mass of research-active staff. The aims set out for REF 2021 therefore focused on improving staffing, infrastructure, and environment to support the researchers currently within the unit, and recruit new members who can contribute to this environment. As such, our aims for growth were:

Expand Staff Base

We grew the staff base by recruiting research-active ECRs who had the potential to become international leaders in the fields of health and/or cognition (based on research projects, grant awards, and publication history), and supporting their development by surrounding them with the people and infrastructure needed to fulfil this potential. Caulfield (until 2017) as research lead of the Psychological Research Group acted as mentor for ECRs such as **Etchells** (joined in 2013, now Prof), **Ravalier** (joined 2014, now Reader), and **Wainwright** (joined 2014, now Reader), each of whom have developed from ECRs upon joining into internationally recognised research leaders (**see Section 2**). This all worked alongside the institutional researcher development events and training, which are held throughout the academic year (see also **Section 2**). The unit also currently houses two Research Fellows, and had a third (Director of the Trauma Foundation South West) from 2015 to 2017, whose role was to support research, staff development, and community integration.

Focus on Applied and Impactful Health Research

A key aim of the strategy was to develop a programme of research which was both high quality and directly impactful on individuals, groups, and/or organisations. These projects therefore not only sought to add to academic evidence, but had tangible and evaluatively-informed lasting benefits for stakeholders. By providing a tailored approach to mentoring, peer review, QR funding allocation, staff recruitment and development (see **Section 2**), and research promotion/public engagement, members of the unit were equipped with the skills and tools to ensure projects were applied and impactful. Examples of successes in this area include **Ravalier** and **Wainwright's** work being used as an example of 'best practice' in supporting social worker wellbeing by the UK government (GOV.UK published guidance) **Vitale** has developed a number of interventions alongside international and industrial partners which have been implemented for vulnerable asylum seeker populations (online post) Other examples include **Thomas'** work with the Royal National Lifeboat Institute, **Paulo's** work with police forces from across the UK and more widely, among others.

Increase Research Income

In the 2014 reporting period, GBP0 was awarded in external research funding as principal investigator to any researchers within the unit (with just GBP22,000 awarded between 1996 and 2014). Between 2014 and 2016 we took a targeted approach to focusing research funding applications around applied Health and Cognition-based research. Support was offered through internal QR funding of small pump-prime research projects (the cumulative QR funds provided to Psychology in the previous REF reporting period was GBP0, compared to GBP22,504 in this), teaching relief for promising ECRs for one year upon first joining the University and established researchers through an internally funded teaching relief scheme, mentoring and peer support, writing retreats, and other infrastructure. Achieving our aim is reflected in the amount of successful external research funds the unit has been awarded. Since 2014, GBP406,486 has been awarded to researchers in Psychology as PI, in addition to Euros216,760 for research, teaching and University governance through Erasmus+, and researchers have been involved as co-investigators in awards totalling GBP2,615,492.

Develop Interdisciplinary Research Collaborations

Research leaders within the unit, in addition to wider University mechanisms, have supported academics in fostering interdisciplinary research collaborations with both academic and industrial partners. For example, members have been supported in running conferences (**Vitale, Ravalier, McGuire-Snieckus**) and funded to attend external meetings (since Covid the University has invested in advanced Google suite functionality to support these meetings). A dedicated Pro-Vice Chancellor (External) supports researchers in developing and maintaining these external relationships. The unit also houses an Industrial Research Fellow to support the team's community-based research (such as that by **Vitale**). Much of the research that is undertaken within the unit, therefore, builds on these collaborative networks with projects running with external partners such as Local Authorities and NHS Trusts, British Association of Social Work (BASW), International Federation of Social Workers, Trauma Foundation South

West, Health Education England, Bank of England, and the Royal Automobile Club (**Jones**), among many others (see **Section 4**).

Improve Research Infrastructure

Following a review of available space and equipment available to researchers in 2014, the University invested into estates spaces and research equipment for researchers within the unit. This includes significant investment in lab spaces such as the video games lab (managed by **Etchells),** Eye Tracking lab (**Jones**), Pain Research Lab (**Walsh**) (see **Section 3** for more).

Attract and Develop PGR Students

A further strategic approach was taken to attract postgraduate research students into the unit while improving the PGR environment (see also **Section 2**). In addition to three internal PhD studentship awards and one fee waiver, we sought to attract PGR students by undertaking impactful research by working with organisational partners, and building a nationwide reputation in applied Health research. Among our 10 current PhD students, therefore, we have two Health and Social Care professionals, and five PGR researchers focusing on Health and Wellbeing of Health and Social Care professionals. In addition to university-wide PGR-specific training and development opportunities, the PCHC also extended all support and training available to ECR lecturers, to PGR students (see **Section 2**).

Impact Strategy

Following the 2014 non-submission, key decisions were made to focus upon health research which sought to develop and work with key stakeholders of the research via co-production (such as NHS or care staff), and through meaningful public engagement which would lead to changes in public opinion, policy, and policy makers. This strategy has seen success through a number of those returned to the unit, ultimately culminating in two Impact Case Studies (ICS UoA4-2 VGE **Etchells;** ICS UoA401 PHW **Wainwright and Ravalier**) returned within this unit.

Co-production with stakeholders

Co-production of research alongside beneficiaries means that stakeholders play an important part in the research process. In 2014, research leadership took the strategic decision to ensure that some of the Health-related research in particular had a co-produced element to facilitate the development of impact. Success in this area includes separate but related projects by colleagues such as **Ravalier** and **Wainwright** (for example, see **Ravalier** et al., 2020; ICS UoA4-2 PHW (**Wainwright, Ravalier**), who co-created mental health and wellbeing interventions for stakeholders in a variety of job roles and occupations.

Meaningful and Impactful Public Engagement

Public engagement was an important impact approach because it not only disseminates the findings of our research to non-academic audiences, but also aims to change public and policymaker perspectives on important health and well-being matters. For example, **Etchells**' (see ICS UoA4-1 VGE) concerted and impactful public engagement has led to documented changes in public opinion of both individuals (e.g. the psychologist article) and groups on the impact of video games and social media on young people through his British Academy Rising Star Engagement award.

Political and Policy Implications

Related to the above, the unit's research also sought to impact upon political bodies and policy makers through public engagement and offering evidence to inquiries. As such, public engagement by each of **Ravalier** (UK Parliament), **Wainwright** ICS UoA4-2 PHW), and **Etchells** (House of Commons report), each led to policy and political impacts including being quoted in both Houses in Westminster, as well as Scottish and Welsh governments (e.g. The Scottish Parliament).

Interdisciplinary Approaches to Research

Interdisciplinary research with external network organisations developed as a consequence of targeted QR funding to initiate meetings, attend conferences, etc. A subsequent emerging research profile has led to tangible impact on organisations such as BASW and Social Workers Union (SWU; **Ravalier,** 2019), NHS Trusts and Local Authorities (**Ravalier**, 2020), refugee organisations (**Vitale**, 2019), and health organisation work such as MECC (**Wainwright**; ICS UoA4-2 PHW). The strategy therefore has led to the development of significant impacts both across each of the ICSs, as well as across the work of other staff in the unit.

Open Research Strategy

The unit's strategy for open research is guided by the institutional approach (IES 2.8.1). All staff are offered annual refreshers to maintain understanding of open research requirements. The UoA's REF lead (**Ravalier**) has responsibility for ensuring colleagues register their outputs on ResearchSPAce, enabling library staff to undertake open publication and compliance actions.

Going 'above-and-beyond' the REF2021 open research requirements, the unit has published open access book chapters to extend reach, e.g. Markopoulos' chapter on contextual information in memory in the Psychology Press' The Preservation of Memory' (ed. Bruno, 2016). The Library has also pledged funds to the 'Knowledge Unlatched' project, a consortial initiative to 'unlock' monographs for open access publication, including a collection of Psychology titles.

Future Strategy

The unit has made significant steps in the last 5 years, and we will continue this by expanding upon the strategic decisions made over the current period of assessment. In addition to increasing research funding and continued impactful work in the Health cluster, the four priorities for growth expand in terms of scope and breadth upon the work we have most recently undertaken as well as ongoing political, social, and organisational impacts. The future strategy, therefore, is to:

Develop partnerships to respond to international priorities

Through the PCHC, we will work with partner institutions in the Global Academy of Liberal Arts (GALA, an international community consisting of 24 institutions founded by BSU in 2014 to develop new kinds of research collaboration IES 4.2.4) and director (**McGuire-Snieckus**) to develop sustainable strategic networks in response to priorities emerging through the GCRF, UKRI, BA and others. Over the first 12 months of 2021, African partner universities will be invited to present to the Brain and Behaviour seminar series and the ongoing Black History: Black Futures commemorations and research talks (run by **Ravalier**). This will mean colleagues within the unit begin to develop research relationships, and from 2022 onwards will seek work on co-funded projects together.

Develop the new Educational Psychology research initiatives

In October 2021, a new undergraduate course in Educational Psychology will begin to recruit students. Alongside this, the team will recruit two new Educational Psychology academics to join the team. **Ravalier** and **Etchells** are leading this recruitment, selecting only those whose research is applied in nature, and allied to the work currently conducted (e.g. **Ravalier** and **Walsh**, 2018; McMahon, Yeh, & **Etchells**, 2019). This Educational Psychology-related work will be developed into a new cluster of the PCHC to reflect its importance, and researchers associated with this new cluster will be provided the same developmental opportunities as all others.

Expand the Cognition Cluster

We also seek to further build upon the existing excellence in applied Health research and expand that to ensure that research in cognition is applied in nature also. Therefore, over the

first two and a half years of the next REF period we will work toward developing an Applied Cognition Research group (led by **Walsh** and **Jones**). To do so, a percentage of QR funds available to the unit will be ring fenced only for applied cognition research and to support the development of research relationships with external academic and institutional partners. The University's Pro-Vice Chancellor (External) will support researchers in developing external partnerships through the development of BSU as a Civic University, and thus developing relationships and networks with local community organisations.

Expand the PGR Community of Researchers

We will continue to grow the PGR community through the continued use of fee waivers and PGR fully-funded scholarships. We also have a new PGT MSc in 'Psychology in Practice (Work, Health and Wellbeing) which begins in October 2021, and thus we expect organic growth and progression from this MSc through to PGR. Furthermore, continued public engagement and demonstrations of the work undertaken in the unit will lead to an expanded PGR community.

Promoting Research in the Unit

Public engagement and promoting the excellence of research within the unit are key considerations of the PCHC. Firstly, we have a monthly seminar series (the Brain and Behaviour series) in which internal and external speakers alternate in monthly talks as well as a regular Psychology podcast series (In Conversation With...). The talks are funded by the School of Sciences and QR funding, with attendance continually good from BSU staff, students from Undergraduate to PGR, and external attendees. The seminar series is developed and led by **Jones** and **de Sousa**, with a key component of the B&B series being diversity, and speakers discussing how to make research (and researchers) more diverse and inclusive.

Etchells (Professor in Psychology and Science Communication) is a leading academic in the Open Access and Open Science initiatives (e.g. see Morey, Chambers, **Etchells** et al., 2016), and all pre-print accepted manuscripts are published on the University ResearchSPAce repository. Furthermore**, Etchells** supports colleagues in developing public engagement profiles. Therefore, alongside his own excellent public engagement (for example, invited addresses to the Cheltenham Science Festival, a best-selling book on the psychology of video games, conference key notes, and hundreds of media interviews), **Etchells** supports and mentors others in their public engagement. Examples of such include hundreds of media interviews across the unit in all major print and online newspapers (for example **Ravalier, Janik McErlean, de Sousa**), invited keynotes to academic and industry conferences (**Section 4**), and speeches in parliament (**Ravalier**), amongst many other public engagement activities. **Etchells** was also science blog co-ordinator for The Guardian, with a monthly readership of up to 1.6 million, and led the paper's psychology blog 'Head Quarters', from 2014 to 2018. Engaging and working in collaboration with diverse populations (for example Healthcare, Social Care, Social Work, other public and private organisations) in the research undertaken across the Unit are also key to the real-world dissemination of our work. Such engagement has allowed researchers to promote research to frontline workers as well as organisational decision-makers, professional organisations and unions, and political/policy makers (for example, see the work by **McGuire-Snieckus, Ravalier, Wainwright, Etchells** and others).

Section 2. People

Staffing strategy

The unit comprises 19 staff (18.5FTE), 12 of whom have been recruited since 2014, and 2 in the months before the 2014 census date. This represents a significant investment from the 2014 period when Psychology comprised just 8 members of predominantly teaching-focused staff. Of those who have joined since 2014, 7 were ECRs (i.e. within 5 years of becoming an independent researcher) when they joined, with 2 current ECRs.

Not only has the unit grown significantly in size, it has grown in research areas (into a focus on applied Health and Cognition), collaborations (see **Section 1**), international reach and expertise (e.g. see ICS UoA4-1 VGE [**Etchells**]), funding and income generation (see **Section 2**), world-leading public engagement (see **Section 1** and ICS UoA4-1 VGE [**Etchells**]), and development of leadership amongst colleagues (see **Section 2**). All staff returned within the unit are employed on permanent contracts allowing continuous and sustainable development and growth. Few staff have left the unit (just 1 since 2014), with that senior researcher (**Caulfield)** replaced by another (**Thomas**) who has worked to support the development and growth of more junior members. New recruits therefore have mostly been ECRs with demonstrable research, publication, grant award, and/or public engagement expertise.

Staff Development

The unit has sought to appoint promising ECRs and provide them with the necessary mentorship, guidance, and developmental opportunities to turn them into leaders in their own research fields while also providing specific, targeted, and strategic personal and career developmental opportunities to more experienced personnel. Therefore all new staff appointed within the unit have distinct research requirements within their job descriptions, and each have been appointed at least in part because their research fits the aims and remit of the PCHC. Research and researcher development is formally monitored through the annual Staff Development Review process.

In 2020, the University retained its European Commission HR Excellence in Research award, after the 10 year external review process, demonstrating the University's commitment to staff and research environment development, while "building on areas of strength and fostering new research areas". As such, we have put together a comprehensive development programme for ECRs, PGR students, and more experienced staff, available through the PCHC, in addition to the University staff development programmes operating in congruence with Vitae RDF guidelines. Staff development opportunities include:

ECR Development

Upon joining the University, ECRs are assigned two mentors: one through the official University mentoring scheme which follows the Vitae RDF programme, and a second through the PCHC. The mentors within the PCHC (**Ravalier** and **Wainwright** are research mentors, **Etchells** is public engagement mentor) each joined the University in 2014 and 2013 respectively as ECRs and have since moved onto appointments as Readers and Professor. Mentors have all completed university-wide mentoring and supervision training, and are assigned to ECRs based on career aspiration. As such, **Ravalier** mentors those for whom seeking research funding is a priority; **Wainwright** for those seeking to build greater external networks with potential academic and non-academic partnerships; and **Etchells** for those seeking to develop a public engagement profile. All ECRs with potential to develop as internationally recognised researchers (for example **Muir, Paulo** and others), based on existing publication and grant records, are given a specific development budget for conference attendance and similar activities, and are also given teaching relief and thus a reduced teaching load in their first year of employment. This is in addition to the SRR research tariff of 180 hours (11.4% workload allocation). Additionally, in 2018, **Thomas, Wainwright**, and **Vitale** were all recipients of university-wide competitive teaching relief support schemes.

A seed fund has been established to support PhD researchers and ECRs to develop their own training events for their peers with the support of the Research Development Manager. This series - 'Journeys in Research' - has been very successful at building a supportive research environment. In line with the Vitae RDF, the Researcher Development programme includes sessions on career development, and the Research Development Manager works actively with our Careers and Employability team to offer appropriate training to FTC Researchers and ECR staff. Careers staff are able to offer one-to-one consultations with PhD students, and offer surgeries at our research site in Corsham Court on a regular basis. ECRs also have access to dedicated QR SEED funding for research and public engagement.

However, through the University Research Support Office, and our Research Development Manager, researchers in all stages of their career are offered training to support them and their development. All new research staff are invited to a Research Induction with the Research Support Office (RSO) and Library Services to ensure that they are aware of the support available to them and the University policies and procedures pertaining to research. Our Researcher Development Manager engages regularly with research staff from these communities, as well as our PhD student community, and has worked with them to develop bespoke researcher development programmes and events.

Leadership Development

More experienced academics are also given the opportunity to take on research management responsibilities which will support both their development and possibility for promotion. **Ravalier** and **Wainwright** were offered the opportunity to create and lead the PCHC in order to bring together the already aligned research by academics in the Psychology UoA. **Etchells** leads research ethics for Psychology and the School of Sciences more widely, **Ravalier** is REF lead for the unit, and **de Sousa** and **Jones** co-lead the Brain and Behaviour seminar series (see also **Section 3**).

Income Generation Support

The PCHC also runs a bid coaching and peer review group. In the bid coaching group, Readers in the unit (**Ravalier, Wainwright**) and Professors (**McGuire-Snieckus, Etchells**) provide advice and guidance on research grant submission processes. There are also early career and more experienced researchers who peer-review grant applications before they are submitted to the University Peer Review College, and to funders. There are therefore examples of success among more recently appointed ECRs with **Paulo, Jones** and **Muir** each having recent grant award successes and a significant research output portfolio. All researchers also have access to research bidding and funding support training run by the RSO, including bid development. The success of these development opportunities can be seen in the breadth of research success that members of the Psychology unit have had across the most recent REF period (see **Section 3**).

Since 2014, the unit's focus of income generation has been on supporting staff in development of bids based around our two areas of expertise. This focus, and working to foster interdisciplinary collaborations with public, private, and third sector organisations, has been integral to funding successes, high quality research and public engagement outputs, and the development of high-quality Impact Case Studies. Examples include **Ravalier's** work with NHS Trusts and Local Authorities, **Wainwright's** work with Public Health England (ICS UoA4-2 PHW), **Paulo's** collaborations with police constabularies, and **Thomas'** work with the Royal National Lifeboat Institute. This work has all directly led to significant research funding and high-quality research outputs in interdisciplinary journals in education, social work, healthcare, and more traditional psychology journals. It has also led to world-leading public engagement such as at the BAFTAs, Cheltenham Literary and Science Festivals, articles in all major newspapers across the UK, interviews on national and international radio and TV, and much more.

Postgraduate Research Students

The unit has a thriving postgraduate research community. PGR students are integrated into the PCHC from the very beginning of their studies. The University runs institution-wide annual ECR conferences for PhD students and early career academics, with senior academics invited to give keynote talks and advice sessions as well as an annual 3 Minute Thesis competition for PhD students at any stage of their studies. Within Psychology, PhD students are invited to give talks to the Brain and Behaviour series. **Ravalier** manages annual QR funds of which a proportion are allocated specifically to PhD students for training and travel bursaries. This is in addition to university-wide PGR support schemes which are available to all PGR students at each year of their study. Finally, **Ravalier, Wainwright**, and **Etchells** act as mentors for PhD

students who are due to complete their PhD within the next 12 months, in order to prepare for work in academia. This mentoring includes career positioning, job applications, and interview preparation and work. Indeed, one of three graduates has subsequently received a full time, temporary lectureship. Those not aiming for a role in academia are paired with our Industrial Research Fellow, to support them in moving forward toward work outside of the academy.

In the reporting period to 2014, the unit had had 0 PhD completions. The unit currently has 10 PhD researchers based in the PCHC, with another 2 co-supervised with external institutions, and 3 PhD completions in this reporting period. Current doctoral students are a mix of internally funded (1 student), externally funded via research grants (1 student), a mix of external and private funding (4 students), and 4 self-fund. Importantly, every student's research is led by a member of the PCHC, with each of those students choosing psychology at BSU due to the emerging and continuing excellence in Health and Cognition research.

We have three distinct approaches to recruiting PhD students to study within the unit. Firstly, we have an active PhD fee and stipend studentship, a competitive scheme open to any Psychology graduate which is made available upon each student's completion of their studies (one completion, with a second currently studying). Within these studentships, funding is also available should any candidate seek maternity or paternity leave (indeed, one student who has subsequently completed has used this). Following completion of the first year progression assessment, PhD students can also undertake up to 6 hours' teaching per week. Secondly, PhD students are encouraged to join the unit due to the success, high-profile media appearances of supervisors, and the professional networks that members have. For example, **Ravalier's** work with social work and education professional organisations led to the recruitment of a social work manager as PhD student within the unit, and **Wainwright's** work on MECC healthcare practitioners as PGR researchers. Finally, we have an active and well-recruited MSc course, through which two PhD students have been recruited.

Institutionally, PhD supervisors (or those interested in supervising) must undertake two day-long training sessions every three years to maintain the most up to date supervisory skills, and have the opportunity to undertake modules (or a full master's) in supporting researcher development. Following induction there are regular opportunities available to postgraduate researchers in the unit. Training is therefore offered for each part of the research process and beyond, including: developing as an independent researcher and project planning; practical research skills such as statistics training and qualitative approaches to research; writing support; preparing for progression and VIVA; and life following the PhD. The training offerings therefore support postgraduate researchers from conception to completion of the research process.

Supervision and robust monitoring of not only research progress but also the health and wellbeing of PhD students is the role of the PGR tutor and PGR management group, which in turn reports to the University Research and Ethics Committee (REC). Each school within the University has one PGR tutor who oversees the progression assessment and annual monitoring processes, and alongside Student's Union and PhD student representatives, also oversees student wellbeing and experience.

Equality and Diversity

Equality and diversity are important considerations within the research workforce in the unit, with this focus clear in representation. Data related to protected characteristics can be found in the Equality & Diversity section of Institutional Environment Statement (IES 3.5).

Leadership responsibilities are also diverse in nature. For example, **McGuire-Snieckus** is Head of School and **Wainwright** co-director of the PCHC with **Ravalier** (male, dual heritage), who is also REF lead. There are therefore clear opportunities for a diverse workforce to lead and be promoted within the unit, and University more widely.

At a University level, the Equalities and Diversity Steering Group (EDSG) is responsible for developing institutional Equality and Diversity policies. The EDSG works with unions, colleagues from across the University, and other diversity groups (for example, the Global Inclusivity Network, of which **Ravalier** is Chair) to develop and set institutional policies for all staff across the University. The EDSG has implemented the equal pay review, which is tasked to ensure fair pay across gender and ethnicity. Similarly, Human Resource-led unconscious bias training for those with any REF responsibility is held regularly. Developing Leaders training and Research and Enterprise Leadership Programmes each also aim to empower researchers from a diverse range of backgrounds to develop into research leaders. Further institutional approaches to support diversity and inclusion include compulsory training modules on Unconscious Bias and Diversity in the Workplace, with optional sessions on Mentoring, Shadowing, and opportunities to become Diversity and Inclusion Champions.

The Psychology unit more specifically has been responsible for various Equality and Diversity initiatives. **Ravalier** leads the Black History: Black Futures monthly events, tied to Black History Month (UK and USA), with an institutional focus on Black successes within and around the unit's focus on science communication and Public Engagement. Similarly, allyship and unconscious bias training has been initiated by **Ravalier.**

Even prior to Covid-19, arrangements were in place for flexible working with staff encouraged to work in the way which best fits around their personal circumstances. They are given a University laptop and necessary research software and access to VOIP. When awarding internal funds, extra funding is available for those with caring responsibilities and/or ill health to support their research careers. We have also employed two Postdoctoral Research Assistants and fixed term lectureships to work on externally funded projects. These individuals had access to the same development opportunities as permanent staff, and given ongoing career and research mentorship by senior members of the PCHC beyond their contracts of employment.

Section 3: Income, Infrastructure, and Facilities

Income

Since the Unit was last submitted in RAE2001, income has grown from GBP22,000 to GBP404,000 in REF2021. External research funding of GBP746,866 has been awarded to staff in the UoA across the REF2021 period, with colleagues acting as Co-Is on external awards worth GBP2,615,492. An additional Euros216,760 has been awarded for research, teaching and University governance through Erasmus+ funding.

Of awards led by Bath Spa, 53% (GBP216,598) was received from Research Councils such as the Economic and Social Research Council, Wellcome Trust, and British Academy, 38% (GBP152,981) from government departments (Department of Work and Pensions/Department of Health and Social Care and Department for Education), and the remaining 8% (GBP33,907) from other charitable and research organisations such as the Association of Anaesthetists of Great Britain, the Experimental Psychology Society, and Bristol Health Research Charity, and through consultancy work.

Infrastructure Supporting Research and Impact

Since REF 2014 there has been significant investment in the research infrastructure and equipment available to researchers in psychology. GBP33,176 was invested through capital investment for the development of physical spaces into usable and productive research labs, and GBP22,504 in QR funds to further support the PCHC's software and hardware infrastructure. Therefore, dedicated research spaces, laboratories, equipment, and software, have all been significantly improved since 2014. The unit and wider University also support researchers based in the PCHC in developing international networks. Furthermore, **McGuire-Snieckus**' Erasmus+ award supports the international development of research collaborations. This has been used, for example, to develop reciprocal relationships with SWPS in Poland with

both SWPS and BSU each sending researchers to the other University to 'bed in' and develop international collaborations.

Due to this investment, we have a number of cognitive and experimental labs managed by senior psychologists to support research. **Jones** (Senior Lecturer) manages the Eye Tracking and Neurostimulation lab, which consists of eye trackers, a Transcranial Electrical Stimulation (tES) device, recording and data analysis equipment, and an auto mirror tracer (for mirror tracer tasks). The unit also has two bespoke qualitative research studios managed by *Vitale* (senior lecturer) and **Wainwright** (Reader) which includes audio and video recording equipment and software, transcription and recording devices, and comfort decorations to build rapport with participants. Psychology technicians maintain and provide support with the use of BIOPACs, which have the ability to record EEG, polygraphs, biofeedback, and spinal cord reflexes amongst others, and **Walsh** (Senior Lecturer) maintains and supports the use of Pain Test Algometers, Fitbits, and iPod shuffles used for research. The unit also has access to experimental and statistical software (and associated training) SPSS, *r*, onlinesurveys.ac.uk, Survey Monkey, e-prime and PsychoPy. Further available equipment includes: a suite of iPADs, and memory, attention, and intelligence psychometric tests; and access to further Transcranial Direct Current Stimulation equipment through collaborations with the University of Bath.

The scholarly infrastructure for the UoA includes Library subscriptions to seven out of ten of the highest impact, internationally excellent journals for Psychology (2019 SCImago international journal rankings):- *Annual Review of Psychology, Psychological Bulletin, Trends in Cognitive Sciences, Annual Review of Clinical Psychology , Personnel Psychology, Psychological Methods, Journal of Applied Psychology.* Library collections directly relevant to the UoA include more than 700 journal subscriptions, 7000 books and 2,000 e-books. The Library's extensive digital collections include the APA's world-class *PsycINFO / PsycARTICLES* databases and Elsevier's *ScienceDirect*.

Library resources for the UoA are underpinned by a team of Subject Librarians, who provide subject-specific support and a defined point of contact for research enquiries. The University has heavily invested in its infrastructure for open research, with both an institutional repository, ResearchSPAce, and a research data repository, BathSPAdata. The repositories are supported by two Research Publications Librarians, who work proactively with the UoA to develop its open research profile. The Library's Writing and Learning Centre supports an inclusive research culture through one-to-one writing support, social media workshops (within the Researcher Developer Programme), 'Journal Club' workshops in scholarly writing (for early stage PG researchers), and research methods training with software such as Nvivo, R, and SPSS.

Section 4: Collaboration and Contribution to the Research Base, Economy, and Society

Academic Contributions

Over the census period, academics in the Psychology unit have published over 135 peer-reviewed journal articles (not including brief reviews or conference proceedings), 29 books or book chapters, and 7 commissioned reports. Of the 46 journal articles submitted to REF for consideration, 42 involved collaboration with academic and/or industry partners and collaborators from outside of the University, demonstrating the strength of collaboration throughout the unit (although the majority [27] of those papers are led by staff returned to the unit).

Relationships with Research Users, Beneficiaries, and Organisations

As per the strategic aims of the unit across this reporting period, developing and maintaining inter- and intra-disciplinary collaborations with other HEIs and other external collaborators was key to conducting internationally-excellent research. Collaborations have particularly focused

on working with different types of organisation. Collaborations with public sector bodies, such as NHS Trusts, Local Authorities and Public Health England, have affected organisational workings and continue to improve employee mental health and wellbeing. Private sector and professional organisational collaborations have led to national and international political and policy impacts. Work with the third sector supports some of the most vulnerable people in the UK and beyond, and collaborations with other departments and HEIs have further supported this. Therefore, these collaborations have been key to the development of research projects, research bids, impact, and public engagement. This mirrors the strategic approach of the wider University, which seeks to collaborate with local, national, and international communities in impactful research while working on socially engaged and practice-based projects.

An important element of the research undertaken by academics in the unit is the involvement and collaboration with end-users, such as staff and patients, in the design, delivery and evaluation of research. For example, **Ravalier** is PI for two externally funded, multi-institution projects which have designed, delivered, and evaluated a series of mental health and wellbeing interventions for public sector employees (**Ravalier** et al., 2020). Similarly, in 2019 **Ravalier** ran a Mental Health and Wellbeing conference, hosted at BSU, for Health and Social Care employers, employees, and academics.

Within the Cognition cluster of the unit, colleagues also have a number of external collaborations with non-academic organisations which support their work. *Thomas* works with the RNLI, Parkinson's UK, the Dyspraxia Foundation, and has input to NICE guidelines to provide impactful outcomes to her research. **McGuire-Snieckus'** funded research works with the South West Adoption Consortium and Department for Education in her research which matches children in care to prospective adoptive families. **Yousaf** has also contributed to a national deradicalisation programme, and thus collaborated with and impacted schools across the UK.

Paulo's research focuses on testing and developing new procedures to enhance eyewitness memory for crime events. This has a strong impact for police forces and other legal professionals worldwide, often leading to the development of effective interviewing protocols and better police investigations. This led to many collaborations with other universities in the UK (e.g. University of Portsmouth) and Worldwide (e.g. University of Minho) and collaborations with other professionals, particularly police detectives (e.g. from the Portuguese National Republican Guard).

Other Contributions and Recognition

In addition to the above influences upon individuals, groups, and organisations, all members of the unit make other significant local, national, and international contributions.

Parliamentary and Policy Influences

The work of researchers in the Health cluster of the unit also has significant impact on government and policy across the UK and more widely. **Ravalier, Etchells**, and **Wainwright** have each had significant impact on national and international policy and policymakers. **Etchells** has given written evidence and been quoted in two House of Commons parliamentary inquiries in 2019 on video games, and **Ravalier** has given written evidence and verbally quoted in a parliamentary inquiry into the Funding of Local Authorities' Children's Services**. Ravalier's** work on teacher wellbeing also formed the basis of the Scottish Education and Skills Committee inquiry His work on social worker wellbeing directly led to a debate held in the House of Lords on the issue, and oral evidence to the Housing, Communities and Local Government Children's Services inquiry in 2019 . **Ravalier's** work has also been quoted in direct questions of ministers in the House of Commons a number of times. **Wainwright** was invited to contribute to the Welsh government review of healthy working lives and is an invited member of the Government's Health and Work Unit advising on the Fit note. Public Health England also added pain and work vignettes, written by **Wainwright** and one external colleague, to the Wessex model of the nationally-adopted Making Every Contact Count

intervention. **McGuire-Snieckus'** development of the Strengths and Risks Matching Tool for adopters and adoptees has been presented to the Department for Education.

Grant and Research Council Reviews; Editorial Boards
Ravalier, Wainwright, and **Etchells** are all invited reviewers for the MRC, UKRI general and Future Leaders calls, and the ESRC. Similarly, **de Sousa** is a reviewer for the BBSRC and UKRI Future Leaders award, and **Wainwrigh*t*** for ESRC (Gap). **Ravalier** and **Wainwright** are invited reviewers for the Swiss National Science Foundation and **Janik-McErlean** for the National Science Centre (Poland). **Thomas** has reviewed final reports for NIHR awards, and **Muir** for CREST (Centre for Research and Evidence Security Threats) awards.

Ravalier is on the editorial board for the journal Occupational Medicine and both he and **Wainwright** are guest editors for the International Journal of Environmental Research and Public Health, with **Thomas** a topic editor on the same journal. **Etchells** is on the editorial board for the Registered Reports Section of Scientific Reports and International Journal of Esports, and Associate Editor at BMC Psychology and AIMS Neuroscience. **Paulo** was Guest Associate Editor at Frontiers in Psychology on a special issue on False Memories and member of the editorial board on Avances en Psicología Latinoamericana. **Albertson** is Chair to the International Relations Committee for the American Psychological Association (Division 2), and **Markopoulos** is an editor for the Kyiv Journal of Modern Psychology and Psychotherapy.

Professional Organisations
As mentioned above, members have worked with and impacted upon professional organisations which represent important employers, employees, and other organisations. **Wainwright** has worked with the Department for Work and Pensions as an expert and thus worked to set the agenda for healthcare professionals in supporting individuals to return to work following sickness absence. **Wainwright's** research expertise along with Health Education England led to adoption of her work into the national MECC training package. **Ravalier's** work with BASW and SWU specifically led to their joint 'Campaign for Professional Working Conditions', and the two organisations adopted **Ravalier's** national social work wellbeing toolkit which has been implemented into a number of Local Authorities (see here).

Ravalier has also facilitated a series of workshops at a number of social work employing local authorities alongside BASW and SWU in order to reduce stress and improve working conditions. Furthermore**, Ravalier's** work on the global social work workforce alongside the International Federation of Social Work has led to the global reporting of working conditions. Similarly, **Ravalier** and **Walsh's** work with the EIS influenced the Scottish Parliament Education Committee's teacher workforce planning inquiry. **Ravalier** and **Wainwright** are both members of the Bath and North East Somerset Health and Wellbeing board, which sets the wellbeing agenda for citizens of the county. **Walsh** and **Wadeley** both conduct research which has influenced patient care at the Royal United Hospital (Bath) and Royal National Hospital for Rheumatic Diseases (Bath) respectively. Finally**, Irwin** conducts monthly consultancy for NHS sexual health advisors, and **Pike** has presented and worked with the Home Office on her doctoral work.

Public, Private, and Third Sector Organisations
Colleagues from across the unit work with various charitable organisations. **Vitale's** key work with the Trauma Foundation (supporting refugees with HIV living in Bristol), and Unseen (supporting human trafficking victims) developed Tree of Life interventions for these vulnerable populations**. Bengry** works in collaboration with the Network Evaluating and Researching University Participation Interventions evaluation framework with colleagues from the University of Bath and other HEIs through the NERUPI network to develop support mechanisms for widening participation students, working with the Western Widening Participation Research Cluster collaborating with the University of Bath and the University of the West of England. **Ravalier** has worked closely with the Psychophysiology and Stress Research Group (University of Westminster) and colleagues at Ulster University, which has led to stress management interventions for social workers. Since 2018, **Wainwright** has also been on the

steering committee for the Centre for Musculoskeletal Health and Work based at the University of Southampton. **Thomas** has conducted research with and written reports for Parkinson's UK about Fatigue in Parkinson's sufferers and is working with the Long Covid Group to assess the impact of long Covid on cognitive functioning. **Etchells** was an invited member of the Department for Digital, Culture, Media, and Sport's roundtable in 2020 which was tied to their call for evidence on the same subject. He also works with UNICEF on their work on child protection risks for online gaming through a series of roundtable discussions and an action plan paper, as well as BAFTA on video games. **Muir's** work on linguistics is also conducted with a Central Government organisation. **Yousaf** worked as a consultant on a number of projects such as a nationalised deradicalisation programme and BBC programmes such as The Truth (About Looking Good). These collaborations have been key to the development of research projects, research bids, public engagement, and so on.

Keynotes and Awards

Etchells' high-standing in the world of video game research and Science communication has led to him being a juror at the BAFTA video games and part of a BAFTA video games live panel. In 2019 and 2020 alone he has also given invited and keynote talks to New Scientist Live, Waterstones, EGX Rezzed, Tobacco Factory London, Swindon Literary Festival, Sidmouth Science Festival, and the Parentzone Digital Families event, amongst others. **Wadeley** was awarded 'best poster' at the BPS general conference in 2014, and various members of the unit (for example **de Sousa, Wainwright, Ravalier, Etchells, Thomas**, and **Paulo**) have all given keynote talks at international conferences and public/private sector organisation conferences such as the Royal National Lifeboat Institute (**Thomas**), and BASW (**Ravalier**). **Muir** won the 'Best Paper' award at the 2016 International Communication Association annual conference, was an invited speaker at PeepSec 2019, and gave a keynote at the White Rose consortium PGR conference at the University of Leeds (2016). **Jones** has given a number of workshops, key notes and invited talks such as to the Universities of Exeter and Bath, the Federal Reserve (Washington DC), and the RAC (London). In 2016, **Paulo** was given a conference award by the Psychonomics society and in 2018 **Fumagalli** was given a Santander conference award. **de Sousa** has given invited talks to Wits University (South Africa) and Science Talks in Radstock.

Journal Reviews

All members of the unit are regular reviewers for a number of journals. Indeed, the team review for over 40 separate journals and have peer-reviewed 10 separate textbooks. These include publishers such as Frontiers Media (e.g. Frontiers in Psychology, Frontiers in Human Neuroscience); Oxford Journals (British Journal of Social Work, Occupational Medicine), MDPI (International Journal of Environmental Research and Public Health); Nature Research (Scientific Reports); Sage (Quarterly Journal of Experimental Psychology, PeerJ, i-Perception); Springer (Attention, Perception and Psychophysics); Hogrefe Publishing (Journal of Individual Differences); Elsevier (Memory, Consciousness and Cognition, Journal of Human Evolution); Wiley (British Journal of Health Psychology, Applied Cognitive Psychology, American Journal of Physical Anthropology, Counselling & Psychotherapy Research); Taylor and Francis (American Journal of Primatology, Architectural Science Review); Emerald (Journal of Migration Health and Social Care), the Royal Society (Proceedings of the Royal Society B), the APA (Journal of Experimental Psychology); PLoS (PLoS One); and others.

Fellowships and Charterships

McGuire-Snieckus is a Chartered Psychologist with the BPS and on the Register of Qualifications in Test Use (RQTU), as well as a Fellow of the Royal Society. **Paulo** is a Chartered member of the Cognitive Psychology division of the BPS and **Vitale** is a Chartered member of the Clinical Psychology division of the BPS. **Wainwright, Jones,** and **Muir** are all Chartered Psychologists with the BPS, **Muir** a Chartered Scientist, and **Etchells** a Lifetime Member of the Applied Vision Association. **Markopoulos** was also the Secretary of the Maths, Statistics, and Computing section of the BPS. All members either have or are working toward Fellowship of the Higher Education Academy. **Vitale** is a nominated Trustee of Art and

Wellbeing South West, **Muir** was selected for the GW4 Future Leadership Crucible Scheme, and **Etchells** on the General Committee for the British Science Association.

Other
Irwin provides a counselling consultancy supervision service to senior Psychosexual NHS therapists as well as supervision for sexual health advisors. **Wainwright** is external PhD supervisor for a candidate based at the University of Bath and **de Sousa** external supervisor for two candidates. **Wainwright** is also doctoral advisor for two external PGR candidates. **Ravalier** and **Etchells** have each acted as an external examiner for PhD candidates at the Universities of Westminster, Bath, and Cardiff. **McGuire-Snieckus'** scale to assess the therapeutic relationship in community mental health care (STAR) has been translated into 5 different languages. A number of colleagues (e.g. **Ravalier, Thomas, Etchells**) have written invited articles for The Psychologist and The Conversation.