

<b>Institution: University of Bradford</b>
<b>Unit of Assessment: A4 Psychology, Psychiatry and Neurosciences</b>
<p><b>1. Unit context and structure, research and impact strategy</b></p> <p>Psychology as an academic discipline at the University of Bradford is proud to have its first REF submission. In the past, some of its researchers were returned to other Units of Assessment, including Social Work and Social Policy. The ability to create a new Unit of Assessment (UoA) A4 submission reflects the ambition to build research capacity following significant investment in staffing and infrastructural resources to create a research-intensive group with areas of international excellence. This submission broadly maps onto the Division of Psychology which sits in the School of Social Sciences (along with Sociology and Criminology, Peace Studies and International Development and Social Work), which in turn, is in the Faculty of Management, Law and Social Sciences. The Faculty was established in 2019 as part of a broader institutional restructure.</p> <p>Our research work fits across a broad University theme of 'Advanced Healthcare' and we annually review research priorities via our psychology research committee (led by Professors Stewart-Knox and Morrison) that reports to the Faculty-wide Research Committee. Within 'Advanced Healthcare' our areas of international excellence are: – Applied Health and Social Psychology (Branney, Binns, Alam, Stewart-Knox, Sullivan, Bryant, Vaportzis, Francis) and Cognition, Brain and Neuroscience (Morrison, Mitchell, Waters, Walters, Lesk). The synergy between 'Advanced Healthcare' at institutional level and our research strengths has created a virtuous circle of research impact that will continue to flourish in the 2020s.</p> <p>To help our research flourish, within this organisational context, we have a three-pronged research and impact strategy that is responsible for significant research outputs and research impact since 2014 and we intend to build on the successes of this strategy in the next five years by working towards the objectives outlined below. Our tripartite research and impact strategy is: 1) Interdisciplinary Connection (see Institutional Environment Statement on interdisciplinarity); 2) Inclusivity (see Institutional Environment Statement on equality and diversity, as well as open research); 3) Nurturing (see Institutional Environment Statement on commitment to developing excellent research through investment and support mechanisms such as mentorship).</p> <p><b>1. Our strategy for interdisciplinary connection has the following objectives:</b></p> <p><b><i>a) To collaborate with colleagues from different disciplines within the University of Bradford on academic grants and publications to maximise research opportunities and research impact</i></b></p> <p>An excellent example of this goal in action comes from our impact case study on the collaboration between psychology (Comerford Boyes, Sullivan, Bryant) and archaeology (Croucher, Büster, Dayes), 'The continuing bonds project'. Using archaeological source materials from past burial rituals, we were able to develop both skills of professional communication in working with the bereaved and individual well-being in negotiating the cultural norms of death and dying. These skills have been applied to engender change in the practices of those who work with the bereaved.</p> <p>Outside this particular project, we have a strong and growing connections with other staff across the University. These include Comerford Boyes who is key contributor to the Chemistry impact case study on molecular music; Sullivan with sociologists on territorial stigmatisation (winner of a university-wide competition for research excellence); Branney and Breen (life sciences) on male incontinence; ongoing collaboration with the Wolfson Centre for Applied Health Research (see point 'c' below) and the Born in Bradford project (e.g. Locke's joint supervision of a PhD on British South-Asian pregnancy experiences). Morrison has collaborations with the Faculty of Health Studies: Centre for Applied Dementia Studies (experience of pain in patients with Alzheimer's Disease) and with Physiotherapy (wellbeing in elite athletes) while Lesk collaborates</p>

with the Faculty of Engineering and Informatics on the use of technology in the assessment of cognitive function (output 3). In this culture, early career members of staff have very quickly connected with the Centre for Applied Dementia Studies in the Faculty of Health Studies (Vaportzis) on loneliness and isolation; Physiotherapy (Vaportzis) on Multiple Sclerosis Interventions; Optometry and Vision Science (Francis, Vaportzis) on macular degeneration; as well as Media, Design and Technology (Francis) on virtual reality.

***b) To collaborate with colleagues from a diverse range of national and international Universities and organisations on interdisciplinary projects that deliver impact***

One example of an international collaboration is our second impact case study (Stewart-Knox – outputs 18, 32). In collaboration with academic partners at Newcastle, Porto (Portugal) and Wageningen (the Netherlands), drawing on consumer research and cognitive science, she successfully led a large European project on personalised nutrition that has had significant uptake in designing interventions in public health and in commercial applications.

There are many other ongoing examples of this strategy in our UoA, such as Comerford Boyes' (2020) recent ESRC funding to make data work for public sector policy, bringing together cultural sector specialists with academics; Mitchell's track record of collaborations with international teams of researchers in securing ESRC funding and generating impact in aspects of social development, particularly autism (outputs 1, 2, 28); Bryant's collaborations with European and U.S. researchers on exercise and eating behaviours (output 19); Morrison's national collaborations on memory (outputs 10, 11); Waters national collaborations with childhood development experts (output 20) and Branney's ongoing work on men's health (particularly penile cancer) with academic and charity partners (output 12). Lavis, following on from her qualitative case study in REF2014 on equality and diversity in prisons, working collaboratively with the prison service, was shortlisted for an ESRC academic impact prize in 2015. Lesk and her PhD student both spent time working with colleagues in Trieste, Italy, via Erasmus funding, on memory inflations. Sullivan has collaborated with the BBC research and development team leading to a publication on the comedy industry in 2015 (output 16) and also collaborates with the 'Association of Cognitive Analytic Therapy' in developing bids and continuing professional development. Vaportzis also presented her research on cognitive interventions to improve ageing at a competitively funded collaborative workshop between BBC and Beltane Public Engagement Network (2017) (output 22).

***c) To build connections between the subdisciplines of psychology as they overlap with health studies and clinicians***

We do this partly through our academic work for the BPS (British Psychological Society) as detailed in Section four, and partly by collaborations within our networks inside and outside the UoA where different facets of the same theme in psychology are explored. Our regular research seminars, discussions and research away days translate into a diverse group of psychologists, who although from different backgrounds, can present a coherent psychological perspective on interdisciplinary projects (e.g. the continuing bonds creative dissemination project; open science; nutrition, mental health, childhood development).

In addition, the Wolfson Centre for Applied Health Research (CAHR) is a collaboration between the University of Bradford, the University of Leeds and healthcare services and aims to improve the health and wellbeing of children and the elderly, and the safety of patients in hospitals and clinics locally and nationally. Its three key themes are child health as a public health priority, healthy ageing as a health service priority and patient safety and quality improvement as a policy priority (see also Section 2). The Wolfson has academic champions across the two Universities who are tasked with advocating applied health research by identifying opportunities and linking clinicians to researchers. Branney is one of the Wolfson champions who draws attention to joint working opportunities between clinicians and researchers such as training and funding initiatives (see also Sections 2 and 4).

***Underwriting our goals within our interdisciplinary connection research and impact strategy in the next five years through the following practices:***

- Run showcasing events in psychology that are widely circulated to the rest of the University and beyond - for example seminars, research funding sandpits, responsive calls.
- Draw on University infrastructure to apply for interdisciplinary projects with existing networks within the University (see Section 3).
- Build on existing and new academic and non-academic partnerships to research significant social and economic challenges that demand an interdisciplinary perspective. As the Institutional Statement makes clear, these challenges are both local and specific to Bradford and international/global.

## **2. Inclusivity**

'Inclusivity' is the second part of our research strategy, something that continues to prove highly successful. This is divided according to the following goals:

### ***a) A commitment to open science and research integrity***

As seen in the Institutional Statement, the University has adopted the UUK Concordat on Research Integrity and has implemented a series of initiatives that encourage and incentivise staff to meet and go beyond the basic open access and research integrity requirements of the REF process.

We are also involved in influencing the wider Social Sciences in the field/area of Open Research and Research Integrity, covering the transparency of data sets, mechanisms of analysis and interpretation to the wider research community. The British Psychology Society (BPS) Research Board have recently published an Open Data Policy which Branney contributed to. Branney is also leading an initiative for the BPS Qualitative Methods in Psychology Section (QMIP) on 'Open Science' and is running a BPS funded seminar series to discuss and champion the complexities of open science across institutions in the UK. Francis received a University of Reading Open Research Award (2019) for championing open practices in her interdisciplinary research across moral psychology and experimental philosophy (outputs 4, 6, 7, 8, 33).

The UoA has two Open Research champions (Branney, Francis), who won an award from the BPS for their contributions to open science. They are available to support staff in their open science endeavours within the UoA. They have delivered research seminars on open research practices to staff and students and these practices are actively encouraged in the division's undergraduate and postgraduate cohorts with many storing their dissertation research data and experimental materials on the 'Open Science Framework' or OSF. Members of the team currently pre-register their research projects on such platforms as OSF and 'AsPredicted' and store their methodologies, analyses scripts, data files and pre-prints on these open repositories.

### ***b) A commitment to equality and diversity in research***

Apart from standard University training in equality and diversity, researchers actively embrace these principles because they improve their research. For example in Mitchell's work, members of the autism community feed into research priorities and design; Sullivan works with ex-service users in mental health (supervising a PhD on the use of dialogical methods in mental health); Branney's work on penile cancer involved an initial workshop with patients that fed into the research design. More generally, members of the team discuss, write and shape the agenda on imbalances in power between the researchers and researched. For example, Sullivan has investigated difficulties researchers face in engaging in participant validation exercises (output 31); Branney (2018) has researched why qualitative researchers find it difficult to share their data with the public and Alam examines dilemmas of being an insider researcher in ethnography, and non-reciprocal relationships. Similarly Binns' work has demonstrated how

social class is an impediment to research productivity and has set up an international organisation to begin to offset that (output 5). Reflexively, both Binns and Alam are sociologists most welcome in the psychology UoA because they add an enriching 'other' perspective to psychological research.

***Underwriting the goals of inclusivity to ensure they are met in the next five years***

- Regular workshops on giving voice to participants in design and analysis of research
- Regular workshops on negotiating the dilemmas of lateral rather than hierarchical research.
- Formal training for the ethical approval process for research, the NHS Integrated Research Approval System and in reviewing ethics submissions. This includes providing free access to the Health Research Authority Learning Management System eLearning modules.

**3. Nurturing**

Our first nurturing goal is:

***To create a vibrant postgraduate research community***

Nurturing begins with our postgraduate psychology community (see Section 2). We promote a research culture that is open, collaborative and interdisciplinary, with psychologists on PhD supervision teams through Health, Engineering, Management and the Social Sciences. We foster a culture of openness and transparency among the community by seeking PhD student input into our research committees, encouraging PhD student participation in research seminars, offering PhD students opportunities to present their research as guest lectures, and research training (a 'Training Needs Analysis' is undertaken annually – see Section 2).

Our second 'nurturing' goal is:

***To attract researchers to the division and support them, at all levels in their career***

This open, collaborative and interdisciplinary culture feeds down (and back up again) from researchers within the division, at all levels in their career. We foster an environment of continual learning and feedback, through varied means. For instance, we have a system of research mentorship for all staff, reduced workload for early career staff, in synchrony with the institution, to help their research flourish (see Section 2), and constructive, pre-submission peer review of publications and research grants for researchers at all career levels. In keeping with our commitment to interdisciplinarity, feedback is not just confined to the psychology team but extends to colleagues in management, engineering, health and social sciences more generally and vice versa.

To underwrite these two goals in the next five years, we will employ the following mechanisms:

- a) Support research students through opportunities for research seminar presentations, representation on school-level research committees, guest lectures and institutional schemes (e.g. conference bursary scheme).
- b) Provision of research leadership, training and support to enable academics at all levels to develop to their potential. Mentoring will continue to be instrumental in developing research capacity, output and impact, alongside target-oriented professional development. This includes regular participation in University-wide events on 'writing for publication', 'attracting research funding', 'research sandpits' and a central internal fund for collaborative bids (see Section 2). This supports and inspires staff to initiate, conduct and publish novel, rigorous, impactful research.

- c) Formal support reviews of career such as the annual Performance Development Review (PDR) and Personal Research and Innovation Plan (see Section 2).

## 2. People

### Staffing Strategy

Since 2016, the division has recruited two new early career staff (Francis and Vaportzis) and one Professor (Mitchell) and, although some have moved on (e.g. Locke to Head of Psychology at Keele University) or have reduced hours (e.g. Stewart-Knox), their replacements have been prompt and our research culture, underpinned by our strategy, has led to good research productivity. The focus for the next five years will be on further strengthening the research capacity of the division and ensuring that we are resourced to be able to deliver our targets.

Our research and impact strategy maps onto an inclusive recruitment and retention structure that fosters career development at every level, with particular emphasis on nurturing early career staff and our postgraduate research community. In terms of recruiting new staff into post, we prioritise equality and diversity by encouraging applications from a variety of backgrounds and by also being clear on the opportunity for flexible working arrangements. Early career staff can apply for a fast-track re-grade after completing an initial nine-month probation period, under clearly published criteria (see below). Throughout their appointment, they are supported in their research by workload allocation, mentoring, training, flexible working patterns, a phased return to work after long-term absence, remote working and active feedback. As a division, we create opportunities to fulfil promotion criteria for all staff – such as open invitations to research and teaching initiatives.

We submit four professors (one at 0.2FTE on the census date in the lead up to retirement), one reader, four senior lecturers, two lecturers and two early career lecturers, with significant responsibility for research and impact. Seventy-one percent of staff in the UoA are female with three of our four professors being female. Our staffing strategy maintains a mix of early career and senior staff, with all staff with significant responsibility for research on permanent contracts. In terms of our recruitment strategy, to maintain this balance we have significant investment planned in early career staff over the next five years. As our current early career staff progress to more senior levels, new early career staff will be appointed as part of our nurturing researcher career strategy.

Since 2014, a number of staff have developed in their career (e.g. Horrocks appointed as Head of Psychology at Manchester Metropolitan University) or careers in the private sector that emerge from academic impact activity (e.g. Victoria Lavis founded an Appreciative Inquiry Consultancy). Other staff remain and have moved through University processes of internal promotion (Sullivan to Associate Professor (Reader), Lesk to Associate Professor, Walters and Waters to Assistant Professor, Vaportzis (early career) to Assistant Professor, Alam to Associate Professor and Binns (early career) to 1.0FTE Assistant Professor on the successful completion of her PhD and previously 0.5FTE).

### Psychology in the context of University Career Structure and Investment in Appointments and Research

The University career structures (Bradford Academic Career Journey, Academic Workload Model, Performance Recognition Scheme – see Institutional Statement) facilitate this career development. The reward mechanisms for research in psychology dovetail with a supportive annual Performance Development Review where staff, in dialogue with the Research Directors, (Stewart-Knox and Morrison), the Head of Division (Sullivan) and Head of School (Mitchell) identify and review research, teaching and administration accomplishments and targets, and reflect on how these align with the University values of 'Trust', 'Innovation', 'Excellence' and 'Inclusion'.

In addition to the career development of the team, there is ongoing significant investment in staffing in the division, with Peter Branney appointed as Associate Professor in Health in 2017 and with the most recent headline appointment being Professor Peter Mitchell, who is the Head of School of Social Sciences.

Mitchell was appointed in April 2020 to strengthen and grow Social Sciences. As a former chair of the ESRC Grant Assessment Panel, he has been mentoring colleagues in their grant applications, particularly those submitted to ESRC (e.g. Comerford-Boyes and collaborators who won a ESRC grant in 2020 – see Section 3). Looking to the future, he will spearhead a programme to recruit new academic staff, with mentoring arrangements in place to help them develop into researchers who deliver internationally excellent or even world-leading research. Mitchell's first appointment to the psychology division, after an internal competition, was Sullivan as Head of Psychology, moving from the Sociology and Criminology division, with Mitchell as a mentor.

In a matrix management structure, that reflects our ethos of inclusive decision making, the joint Research Directors (Professors Stewart-Knox and Morrison) identify training needs and research goals for individual staff. They work closely with the Head of Division and feed into and from the Faculty Research Director. In collaboration with the Head of Division, they help identify and foster a culture of continual professional development by enhancing and leading on the training resources below:

#### **Training Strategy: The Apprenticeship model of Mentoring (Know-How)**

Under our mentorship scheme, outlined in Section 1, the Head of Division and Research Leads work together to ensure that staff feel supported and can develop their research. Training is available and encouraged for mentors via annual Faculty level training, organised through the Dean's office. Some staff have more than one mentor, for instance a teaching mentor and a research mentor. The research mentor will receive workload points to meet at least once a semester and will review draft publications and research submissions, advise on outlets for publication and funding bodies, and actively integrate mentees into research networks.

Within the University context, all research applications are assessed by an expert from Research and Innovation Services (RaIS), who gives detailed written feedback and suggestions on how to improve proposals, identify partners and connect with other researchers across the University (see Section 3).

All PhD supervisors need to support a student to completion as co-supervisor before working as Principal supervisor, in order to learn from the experience of a Principal supervisor in action.

#### **Training Strategy: Know-What Research**

Consistent with our internal-external research partnership strategy, we have a similar internal-external training strategy premised on interdisciplinary connection, inclusivity and nurturing. This strategy maps onto Vitae's Researcher Development framework and includes the provision of ten Research Days for training per year – but we embed these events into everyday activity, as well as reserving specific days, such that both a narrow and broad definition of training permeates our research culture.

#### ***Internal to the UoA for Psychology:***

On his appointment, Branney initiated bi-annual 'Train Ourselves' sessions. This involves a wide collaboration between staff, students and alumni who share views and experiences on different psychological topics. To date, these have focused on different facets of communication, including presenting skills and explaining what you do, who you help and how to communicate with non-academic audiences. We collectively identify shared research training needs and devise half- and full-day training sessions in response. We also have annual 'away days' where successful research ideas are shared and small group collaborations are encouraged; we target

funderson and share ideas of what worked well and what did not work well in the journey from research idea to completed proposal.

### ***Within the University:***

As seen in the Institutional Statement, the University through RaIS, offers a series of training initiatives for its researchers including: writing retreats, 'How to win research funding', 'Finding Research Funding', 'Writing for Publication' and 'Research as a way to respond to COVID-19'. Staff attend relevant training events, which are identified and noted on their PDR. Outside customised researcher courses, staff benefit from courses covering topics including 'Equality and Diversity', IT related training, library run courses (for example on systematic reviews).

### ***Partnerships with the NHS for the local community and nationally:***

The Wolfson CAHR (Section 1) has academic champions across the two Universities (Bradford and Leeds) who are tasked with advocating applied health research and training by identifying opportunities and linking clinicians to researchers. Branney is the Wolfson champion representing the School of Social Sciences (see Section one), most recently partnering up with colleagues from the Bradford District Care Trust to secure funding for an information resource, and staff training in it, for those with mental health issues (see Section 4).

### **Equality and Diversity Strategy**

All of our academics receive training in 'Diversity in the Workplace', GDPR, and Health and Safety. These are supplemented by training courses in 'personal resilience', 'mindfulness' 'dignity and respect' and 'managing conduct in the workplace'. Conscious of his responsibilities as a manager of researchers under Vitae's 'Researcher Development Concordat', Sullivan has undertaken training in equality and diversity as it pertains to researchers, with one of his first actions being to join the University 'Race Equality Staff Forum' and to complete training in 'Leading others in changing times', 'Recruitment and Selection', 'Diversity in the Workplace' and 'Managing a Remote Workforce'.

There are general university supports available for staff returning from long-term leave (e.g. maternity leave or sick leave), such as a phased return through a reduced workload; flexible and remote working to facilitate childcare and caring responsibilities; job sharing and reduced hours in the lead up to retirement.

We have trained all academics in reviewing articles with the help of RaIS and we have been clear that quantitative and qualitative psychology bring diverse strengths to the UoA – as this diversity of knowledge also reflects a diversity of academic identities. However, the general disaggregation of outputs from individuals has also been emphasised in training, which has helped unite staff in approaching our REF submission as a team effort.

Our academics in psychology further shape institutional-level policy from a University perspective. For example, Vaportzis (early-career) and Stewart-Knox sit on the University Athena Swan panel and Alam is Chair of the Race Equality Staff Forum.

### **Embedding our career and training strategy into our Postgraduate Research (PGR) Culture**

#### ***PGR Career***

Doctoral students contribute significantly to the research community in the division and our numbers have grown over this REF period, from 2 in 2014 to 14 in 2020 (with 13 completions in-between). We have a healthy PGR community spanning all aspects of research in the division. Improvements in support for doctoral provision include office space, computer labs and psychology equipment for PhD students (see Section 3).

Research students are recruited through a variety of means, from successful undergraduate supervision that evolves into a larger scale research project, to career talks, to external advertising (findaphd.com) to all students who wish to further develop their research with the team at Bradford. Many of our students are from the local British-South Asian community and have interests in psychological issues that pertain to this community (e.g. Sullivan, Alam and Locke supervise Amirah Akhtar's work on post-natal depression in the community with Born in Bradford; Sullivan and Intezar supervise Simran Basra on young British Muslim women's rule-breaking; Alam, supervised Hussain's work on young British Pakistani women's involvement in higher education (output 17)). Walters and Lesk supervise Faiza Choudhry Parveen's research on neuropsychological testing in the British South Asian Elderly. As we build our expertise in this area and encourage our doctoral students to outline their research interests to our UG students, it creates a virtuous circle that attracts more students from BAME backgrounds into doctoral research.

Consistent with our interdisciplinary research strategy, we co-supervise outside the Faculty with the Faculty of Health Studies (Binns, Locke, Morrison, Waters), Life Sciences (Bryant, Locke) and Engineering and Informatics (Lesk), as well as with external partners (Wolfson/Leeds – Bryant, and Manchester Metropolitan - Walters). Lesk is the PGR lead for the Division of Psychology.

### ***Nurturing through Confidence-Building***

Students are encouraged to submit a presentation at the Doctoral Student Conference convened annually to help them become accustomed to presenting their research in poster and verbal format. This is a major event with students attending across the Faculty that attracts prestigious keynotes to Bradford (for example, Steven Pinker delivered a keynote in 2021). Students are given the opportunity to obtain funding for external conference presentations and training events to benefit their studies as part of a competitive scheme run twice a year. For example, the scheme funded Faiza to present her work at the University of Salford PGR conference where she was recognized with the "best presentation by a PhD student" award.

Within the Division of Psychology, we have a newly initiated annual full day seminar event for PGR students who present their research in a seminar format to the division with members of the University outside the division also attending.

There is also a new University-wide annual doctoral prize for innovation and impact with Sullivan's student (Dennison) winning in 2020 and Stewart-Knox's student (Adekbya) winning in 2019.

### ***Inclusive Training and Support***

The University has a 'Bradford Fellowship' scheme to award Doctoral students with a certificate in teaching, as the first in a three-step qualification leading to HEA recognition. Students typically assist with teaching and communicate their own research interests to undergraduates and masters students, while studying and writing up their research-led teaching from a pedagogical perspective. In psychology, all PhD students have completed or enrolled on this fellowship pathway.

The University also has a 'Postgraduate Research Framework' that aligns with all 12 sub-domains of the 'Researcher Development Framework' from Vitae. It offers stand-alone training (e.g. in SPSS and Nvivo), attending any 20-credit module at MSc level, one-to-one training and development (e.g. in writing skills), external training, induction and outduction, navigating online resources in wellbeing (The wellbeing thesis) and research seminars and events.

For psychology students, training in advanced research methods is particularly important (e.g. 'Advanced Psychological Research Methods', 'Critical appraisal of the literature for PhD study', and 'Interviewing and Communications Skills'). Stand-alone shorter training modules in specialised software are also critical. There is an annual progress monitoring meeting for PhD



students that includes a 'Training Needs Analysis' where such gaps in knowledge are jointly agreed by PhD students and supervisors, with a training schedule identified as required.

An important support for doctoral students is 'PGR Connect: peer-support for all doctoral researchers'. Small groups of up to six doctoral students meet once every two months, led by a trained 'Connect' leader, who is also a PGR student at Bradford. There are also supportive 'Shut up and write' sessions that align with the global 'shut up and write' sessions. For students who are struggling to complete, a capability procedure helps set clear, manageable objectives for students to help get them back on track. For students who are struggling with personal circumstances, there are procedures in place such as suspension of studies and extension of registration.

Our PhD students in psychology have gone on to a variety of careers, including two lectureships at the University of Bradford; a research assistant at the University of Durham; an Assistant Clinical Psychologist; and two consultancy firms.

### **3. Income, infrastructure and facilities**

#### **Income**

Our research funding success maps onto our general ethos as a University of inclusion and our divisional strategy that has equality, diversity and collaboration at its heart. This strategy has led to funding for our central themes of 'Health and Wellbeing' from two external sources in the main – Research councils and Charity funding, with some additional funding from industry and internal University of Bradford seed funding. Our strategy for increasing research funding is to combine strengths in relevant research teams brought together by structures such as: the University's 'Research and Innovation' workshops on winning grant funding; organised cross-University sandpits on targeting funding; Faculty-run research days identifying cross-faculty opportunities; and specific psychology research away days that identify research opportunities.

Our stand-out examples are:

#### **Research Councils**

- 1) In 2013 Lavis secured a large ESRC research grant, for four years, to the value of GBP633,417 for a project entitled 'An appreciative inquiry into the response to diversity in three Yorkshire Prisons'. In 2015 this project was shortlisted for the ESRC prize for 'outstanding impact in public policy' for changing national and local policy on revising the care for transgender prisoners, improving training for prisoners to act as Equality Representatives and revising mechanisms for reporting and investigating discrimination and inequality.
- 2) Mitchell is PI on an ESRC-AHRC UK-Japan SSH connections grant (GBP50,000, February 2019-June 2021) and CI on an ESRC project grant entitled 'Humour in childhood: Pathways to better wellbeing,' (GBP300,000, Feb 2020 to June 2023).
- 3) Stewart-Knox led a work-package on a large EU grant entitled Food4Me that looked at personalised nutrition and ran from 2011-2015 and for which she was awarded EUR310,088. Subsequent work and outputs underpinned one of our impact case studies.
- 4) In 2020, Comerford-Boyes is CI on ESRC project funding: Making Data Work for Public Sector Policy: A scoping study to develop a mixed-methods framework for culture (GBP161,544), that is the natural culmination of a track-record in funded community research (see below).

**Early Career Funding**

We have two early career staff in our UoA and both find the research culture and strategy conducive to successful bids for research funding.

- 1) Francis was successful in securing a British Academy/Leverhulme Research Grant (2020-2022) to the value of GBP10,000 for a project entitled "VIRTUES: VIRTUAl Ethics Simulations" which will support the development of a battery of moral decision-making assessments using Virtual Reality (VR).
- 2) Vaportzis was successful with an Interface grant application in 2018 (GBP10,000; Co-PI), and a Velux Stiftung project grant in 2016 (approximately GBP345,000; named investigator). She won a Newton Fund 'Research Links' travel award to present her research at FAPESP in Sao Paulo, Brazil (2016; GBP1,500; winning the best presentation award there), an ESRC training award (2019; GBP200), and two Erasmus workshop attendance awards (Amman, 2020, GBP1,260; Bucharest, 2020, EUR1,340).

**Charity and Local Government Funding**

We have also secured smaller external research funding during the assessment period.

- 1) Locke was successful in a BPS Research Seminar award for her collaborative work on Networking Families (in collaboration with the Open University and the University of Northampton), along with a BPS International Conference award where she received funding to present a symposium on this research. This was presented at Association for Women in Psychology (Rhode, Island, USA, Feb 2019).
- 2) Branney and Francis were successful in their BPS Research Seminar Award (GBP2,000) for the series on Open Science practices which will bring together both quantitative and qualitative psychologists to scope and examine issues on open science for qualitative methods and articulate recommendations for future research.
- 3) In 2020, Branney, Francis and Branney and Sullivan's PhD student Josh Granger were awarded GBP10,000 by the Orchid Charity (for testicular, penile and prostate cancer support) to research and develop support mechanisms for phone-ins.
- 4) Comerford-Boyes secured GBP9,300 from the Big Lottery Fund (2015), GBP5,800 from the Ministry for Communities Housing and Local Government (2019) and GBP1,500 from Pilgrim's Trust and Ministry for Communities Housing and Local Government (2018).

**Internal Funding**

Our research strategy of intra-university collaboration draws significant seed funding ('Research Development Fund'- RDF) targeted at supporting those at the very early stages of the research cycle and rewarding the outputs of research funding (see also Institutional Statement).

- 1) Francis along with colleagues from the Faculty of Life Sciences and Faculty of Engineering and Informatics were awarded RDF funding to the value of GBP10,000 to create a VR cave and mobile VR system to build capacity and grow inter- and cross-faculty collaboration.
- 2) Similarly, Locke won small scale RDF funding (GBP800) to develop her research on 'Networking Families' with colleagues at the Open University and University of Northampton (output 9).
- 3) Two psychology staff (Vaportzis, Waters) and Binns from Sociology and Criminology were successful in receiving RDF funding to attend a writing retreat at the university.

- 4) Lesk and Walters were successful in winning Faculty funding to develop the impact of their work on caffeine and cognition in the elderly (December 2017) (output 15).
- 5) Both Locke and Bryant have also been successful in PhD studentship bids with Faculty of Life Sciences through GCRF funds. Comerford-Boyes, Sullivan and Bryant have a successful collaboration with Croucher in Archaeology (Life Sciences) on 'death and dying' that was awarded internal Collaboration, Capacity and Intellectual Property (CCIP) funding (part of our Continuing Bonds impact case study).
- 6) Binns, Branney, Francis and Waters were awarded RDF funding of GBP4,482 in 2020 to examine the impact of Covid on research activity.
- 7) Binns was awarded GBP550 RDF funding in April 2020 for a short-term rapid response COVID-19 study of the effects of the changes to online teaching on undergraduates and post-graduates during the first UK lockdown.

### **Infrastructure and Facilities**

During this REF period, the University of Bradford has invested in research facilities relevant to this UoA. In the psychology division we have a cubicle suite of 11 rooms, each with one or more dedicated PCs, which can accommodate between two and six people. One of the cubicles has widened access to facilitate wheelchair users. We also have a lab that contains 12 PCs and presenting facilities. All PC's have access to the latest versions of SPSS, Nvivo and Office 365 as well as software used for creating and running psychology-based experiments (E-Prime, P.E.B.L and PsychoPY).

Health psychology and psychophysiological research is supported via equipment (two Biopac MP36 and a Biopac MP-150) capable of measuring aspects of brain and body physiology (electroencephalography, electro-myography and electrodermal responses). We have a healthy eating laboratory with equipment (Tanita) for measuring BMI and aspects of physiology (visceral fat, metabolic age) related to the psychology of eating.

Aspects of social psychology are studied in a bespoke observation lab that is used for studying human behaviour and observable interactions. There is an interview room with sofas and an observation room with a desk and seating for six individuals. Both rooms have two-way mirrors so that observations can be made from either side of the glass. They also have wall-mounted panning cameras and microphones, which can be operated from a control room, and recordings can be made digitally and converted to a number of formats. The observation lab includes a high-end workstation with professional video analysis and editing software capabilities. The rooms are suitable for interviews, focus groups, social psychology experiments, developmental studies of mother/child interactions, and studies of emotional and facial expression, and body language. We also have a Speech and Language Laboratory which houses a soundproof booth and is primarily used for sound recording and speech analysis.

In December 2020, Mitchell, Sullivan, and Cockshaw made a successful, internal University bid to upgrade facilities under the UKRI 'World class laboratories' initiative. GBP33,000 (excl. VAT) was awarded to increase the Biopac equipment to four, upgrade the observation suite and interview room, and invest in two Virtual Reality Headsets. Further improvements in infrastructure during the current REF period include the creation of a moral psychology lab.

Software improvements central to the improved research strategy of the UoA are continually procured. These include an upgrade to online experimental applications (e.g. Gorilla Software), the latest versions of Nvivo and 'online surveys', all of which facilitate the research activity.

### **Collaborative use of research infrastructure:**

We have access to eye-tracking equipment via the School of Optometry and Vision Sciences and further Virtual Reality facilities via the Faculty of Engineering and Informatics. Francis and

colleagues in the Artificial Intelligence (AI) Research (AIRe) Group are collaborating on several projects exploring empathy and morality considerations in AI systems utilising the group's advanced hardware (high computing and storage capacity).

**Lab/research support:**

We have two dedicated learning support officers, who offer learning and technical support in Psychology. Both have extensive experience in supporting, maintaining and running the psychology facilities at the UoB and have supported MSc, PhD, and staff research.

Both are members of the Association of Technical Staff in Psychology (ATSiP) which enables knowledge transfer between technicians from other institutions including discussions related to software, equipment and technical issues, to ensure that our technical support to research staff is of a high standard. Connections with University networking specialists are maintained to provide quality technical support for researchers i.e. ensuring essential software is updated.

**4. Collaboration and contribution to the research base, economy and society**

As outlined in Section 1, we actively seek collaboration from within and outside academia as part of our research strategy. Our high-quality research, in turn, has meant that our psychology team is sought after to disseminate its research for the benefit of the research base, economy and society, especially including the local community. A good example of the thin line we cultivate between industry and academia is Lavis' move from academia to setting up her own successful consultancy company.

**Dissemination**

**Media and Public Engagement Events**

We engage with a wide public audience through the media – for example, members of the team regularly publish in 'The Conversation', (Binns 2019, 2020, Francis, 2019; Morrison, 2019, Stewart-Knox, 2019; Locke, 2017, 2018, Alam, 2018) and major news outlets (e.g. The Independent, Guardian, Evening Standard, Times Higher Education). Members of the team have disseminated their research through major television outlets (e.g., Morrison on trolling to BBC One News and BBC Sunday Morning) as well as interviews with various radio stations (e.g. Alam's work on identity and car culture led to an in-depth interview with Laurie Taylor on BBC Radio 4), newspapers and on TV series (e.g., Francis, "Secrets of the Brain", 2015/16). Alam also consulted on and featured in a BBC television documentary exploring migration and settlement amongst Bradford's Pakistani heritage communities, particularly through the role of photography studios.

Walters and Morrison have been invited speakers at National Science and Media Museum Lates events (2015, 2017). Stewart-Knox has presented her research findings on 'Mood, Food and Superfood' to a Public Workshop held in Hobart, Tasmania 6<sup>th</sup> February 2019. Stewart-Knox has also taken part in international debates e.g. 'Personalised nutrition: is the time ripe for I-nutrition?' hosted by Nutraingredients.com and Food Navigator.com on-line 26<sup>th</sup> January 2017, and 'Personalised nutrition: health care or innovation opportunity?' held in Brussels 26<sup>th</sup> February 2015. In 2015 Vaportzis presented research on healthy ageing at Soapbox Science (a public outreach platform that promotes women working in science and the research they do) and participated in 'I'm a scientist get me out of here', an online, student-led STEM enrichment activity supported by the Wellcome Trust (2016). In 2018, she presented her research to 'ROAR Connections for Life' (an organisation that promotes wellbeing in later life) and to MS Society social groups 2020. She also disseminated the results of her national survey on what people think about what keeps them sharp in collaboration with 'Age UK' and other ageing charities.

Many staff have participated in other engagement activities including 'Psychology in the Pub', a BPS initiative to bring Psychology to a wider audience (Vaportzis, 2015) and Bradford Café Scientifique (Bryant, 2019; Francis, 2020). Francis has presented and demonstrated at ESRC

Social Science Festivals at several institutions (2014 – 2018). We are also actively involved in public engagement committees. For example, Francis is an active member of the Bradford Café Scientifique steering committee ensuring that psychological research is well represented in public engagement activities. Binns is regularly invited to speak to lay audiences – she has presented to evening audiences for North Yorkshire County Council Library events and the Bradford Mechanics Institute.

### **Public Policy**

Morrison reported her survey on trolling of MPs to the All Party Parliamentary Group for Psychology (APPG) in 2018, along with Locke who presented on gender and trolling. This dissemination event brought together the BPS, with parliamentarians and a wide variety of experts on social media and trolling.

Peter Branney and the charity Orchid with whom he works addressed the APPG on Male Cancer in 2019, to outline ways in which patients can be supported both before and after treatment.

### **Industry**

Stewart-Knox has delivered 20 invited talks since August 2013 to food industry consortia including the Federation of European Rice Millers, Health Claims Europe, Kisaco research and professional groups, on psychological and consumer aspects of personalised nutrition. Stewart-Knox is a Scientific Advisory Board Member with the Research Centre of the Institute Paul Bocuse (France) and on two European based start-up companies Qina and MixFit (2019-2020).

### **Health Practitioners**

Through collaboration with the Wolfson CAHR (see Section 1) Branney has established relationships with mental health services in Bradford that are keen to develop their research expertise. For example, we have agreed a Research Fellowship that is co-funded with the University at 0.2FTE by Bradford District Care NHS Foundation Trust for the Trust's Lead Psychological Therapist, to develop an information resource for people experiencing psychosis. Branney was also a keynote at the British Association of Urology Nurses Conference (2019).

Other examples include Sullivan who was invited to the 'Annual Association of Cognitive Analytic Therapy' conference as a plenary speaker (2019). He has also been interviewed about his work by the Association for their periodical.

Our PGR students have also had an influential impact on this area. For example, Delderfield (2018) published a book on male eating disorders and has worked with health professionals to bring about positive change in the treatment of men with eating disorders.

### **Academia**

#### *Invited Talks*

We have a long track record of being invited to talk at conferences. Stewart-Knox has been invited to present her work on personalised nutrition internationally (e.g. Personalised Nutrition, University of Turku, Finland 2019 and Personalised Nutrition Summit, London, 2018).

Sullivan has been invited to deliver a keynote at the 'Qualitative Methods in Psychology' (QMIP) conference in 2018, and History and Philosophy Conference, 2019 (output 26) and the Applied Cognitive Analytic Therapy Conference, 2018. He has delivered invited seminars in the UK and Ireland (Public Health Institute, St. George's London, 2020; ESRC White Rose Doctoral Training Centre, University of Leeds, 2019; Psychology Department, University of Maynooth, Ireland, 2018, output 24).

Branney has presented a keynote at QMIP Section conference (2017) and was invited to present his work on Open Science more recently (Aston University, UCL, University of Surrey,

University of Cheshire 2019-20, University of Keele, 2020). Branney also co-led a webinar for the Division of Health Psychology, BPS (May 2020). Our early career researchers have started to develop international reputations in their respective areas of expertise.

Francis has been invited to present her work on moral cognition (Karel Capek Center for Values in Science and Technology, Czech Republic, 2019; London Judgment and Decision-Making Group, UCL, 2020; Online XPhi Conference, 2020) and to present a keynote at the European X-Phi Conference, 2021. Francis has also been invited to deliver workshops on using Virtual Reality in psychological research (iCog Conference, 2019; MultiMind Summer School 2019) and online data collection (University of Reading, 2020), and to discuss her work on Open Science (BPS, 2019).

Vaportzis has been invited to present at the Investigators Meeting of Omeros Pharmaceuticals (San Diego, USA; 2014), ESCOP (Cyprus, 2015) and the University of Glasgow (2016). Vaportzis was invited to deliver a psychology workshop for students in Poland (Krakow, 2020).

Binns was invited to speak at the National Education Opportunities Network (June 2018), The annual British Sociological Association (2019) and the international History of Education Society Annual Conference (2020). She is a founder member of the international Association of Working-Class Academics, which now has 1600 global members.

### **Sustainability of the Discipline**

We help sustain the discipline primarily through our engagement with the British Psychological Society (BPS).

### ***BPS and International Societies***

Mitchell is ex-Chair of the Developmental Psychology Section (2018-2020); Sullivan is Chair of the 'History and Philosophy of Psychology' Section (2018-21), Locke is ex-Chair of the BPS 'Psychology of Women and Equalities' (POWES) Section (2016-2019) having previously also been Deputy-Chair of the BPS Research Board (2015-2018), Deputy-Chair of the BPS Ethics Committee (2014-2015), and Chair of BPS Social Psychology Section (2011-2015). Branney is ex-Chair BPS QMIP Section (2014-17); Chair of BPS Senate (2017-Present); and Chair of the QMIP sub-group looking at the implications of Open Science in Psychology, Morrison is ex-Chair of the BPS Education Board, and former trustee of the society (2013-16).

Sullivan is involved in organising the annual 'Stories of Psychology' event with the 'History of Psychology Centre' in London. This event features themed talks of interest to practitioners and the wider public (e.g. the history of 'work psychology', 2019). Similarly, Locke was involved in organising the annual 'Stories of Psychology' event with the 'History of Psychology Centre' in London (2017) to mark 'Women in Psychology', an event run in collaboration with Psychology of Women & Equalities Section to mark POWES 30<sup>th</sup> Anniversary.

Internationally, Locke is the Secretary of the International Society for Critical Health Psychology (ISCHP, 2017-2021) and was a founding member of the Association for European Qualitative Researchers in Psychology (EQuIP, 2019).

### **Wider Influence on the research base**

Sullivan is the editor of the 'History and Philosophy' Periodical and an Associate Editor of 'Theory and Psychology'. Francis is an Editorial board member (Action Editor) for 'Nature Scientific Reports' (2017-ongoing). Branney is Editor & Executive Board Member, 'Psychology Resources Around the World', International Union of Psychological Science. Locke is Editor in Chief of 'Health Psychology Open' and sits on the editorial board of 'Journal of Health Psychology', and, until recently, 'Psychology and Health'. In addition, Locke guest edited a special issue of the 'Feminism and Psychology' on social media and feminism (2018). This work

has been nominated by the journal for an Association for Women in Psychology award. Binns sits on the editorial board of 'The Journal of Class and Culture'.

Many of the psychology team act as reviewers across a wide range of publications in psychology, for example 'Journal of the International Neuropsychological Society'; 'Cognition'; 'Journal of Neuropsychology'; 'Frontiers in Human Neuroscience'; 'The BMJ'; 'Frontiers in Psychology'; 'Journal for the Theory of Social Behaviour'; 'Thinking Skills and Creativity' and 'Theory and Psychology'.

Additionally, many of the team have reviewed bids for funding bodies (e.g. Branney, Grant Reviewer, Cancer Association of South Africa); Stewart-Knox (ESRC 2017; BBSRC 2015; MRC x 2 2015; Wellcome Trust 2014) and Locke, ESRC & National Science Foundation, USA. Mitchell used to chair the ESRC funding panel for psychology (2015-2019).

### **Visiting Professorships**

We play key roles in collaborations with external partners. Francis has been awarded a Visiting Professor Fellowship (University of Bucharest, 2021) and Stewart-Knox was a visiting fellow (Funded: USD7,352) at the University of Tasmania (January-February, 2019). Locke was a Visiting Professor of Social and Health Psychology, University of Derby (2013-2018) and Bryant is a Visiting Fellow at the University of Leeds.