

**Institution:** Royal Holloway, University of London

**Unit of Assessment:** 03. Allied Health

### **1. Unit context and structure, research and impact strategy**

Royal Holloway's Allied Health group is a research unit (8.6. FTE) embedded in the Department of Psychology and the School of Life Sciences and Environment (abridged to School). In this new Unit of Assessment, psychologists collaborate with clinical researchers in medicine and other health-related disciplines. The research strategy of this unit is defined with the Department of Psychology. It supports socially engaged research that delivers public benefits; establishes a research culture that values scholarship, champions methodological diversity and incubates professional relationships with our stakeholders, while sustaining and supporting a diverse and inclusive research community.

Our record of grant capture reflects the diversity of our research partners we engage with including the National Institute for Health Research, Novartis Pharma AG, Arthritis Research UK and Multiple Sclerosis Trust.

#### **1.1 Research structures**

Since 2014, our research has been structured around three research groupings. First, we established a Health and Well-Being Group in 2015 to consolidate and support our research strengths in the fields of clinical and health psychology. This created the basis for the Allied Health unit and enables staff and students to cross-fertilise research and deliver impact and knowledge exchange with patient communities and professional stakeholders. Secondly, the Health Psychology Research Unit (led by Bradley) and other smaller groups advanced work on Patient-Reported Outcome Measures (PROMs) research. Finally, we established a new research centre, Centre for the Study of Pain in 2018 to signal our ambition to expand our research interests in long-term health conditions that involve chronic pain.

#### **1.2 Research strategy and objectives 2014-2020**

After establishing the Health and Well-Being group, we undertook a strategic research review which led to the following objectives:

- *Prioritise the Measurement of Patient Outcomes.* Led by the Health Psychology Research Unit (Bradley) this includes patient-reported outcome measures for diabetes, chronic kidney disease, eye conditions, other endocrinological conditions, HIV, vascular conditions, Parkinson's disease, dementia, cancer (Bradley); chronic pain (Pincus); and MS (Langdon). This research prioritises methodological rigour and involvement of patients in the construction, development and testing of measures.
- *Advance research into Public Health improvement.* Creating evidence-based pathways towards better care, including randomised controlled trials, and implementation of interventions for hard-to-reach groups. This led to randomised controlled trials designed to improve community mental health provision for vulnerable individuals (Ellett and Kingston); acceptance and commitment therapy for enhanced mental health treatment and promotion of mindfulness and well-being (Kingston); and mental health provision for prisoner populations (Glorney).
- *Invest further in Digital Technology in Health Care.* This research improves the accessibility of digital tools for diagnosis and for the provision of interventions (Langdon, Brown), and includes colleagues in Royal Holloway's psychology department (Walker). This generated online ACT protocols for people with head injury, depression (including

post-partum) and paranoia (Ellett) and online well-being and personal futures planning (Macleod). It also enabled collaborative PhD supervision as part of the College's Magna Carta doctoral training centre (funded by the Leverhulme Trust).

The research strategy of the School identified Allied Health as a priority area and hence the decision to support this first-time submission.

### **1.3 Supporting interdisciplinary research**

Our work is co-designed with relevant health, pharmaceutical and patient-led partners to ensure that we deliver evidence-led interventions and improved patient outcomes. We aim to build collaborations with other health-related researchers and clinicians in the UK and globally. In order to support inter-disciplinary research, we seek to:

1. participate in diverse research groupings;
2. build long-lasting relationships with clinical researchers in medicine and disciplines allied to health;
3. establish support mechanisms for our PhD researchers so that they recognise diverse, demanding, and dynamic health care environments.

In order to action that ambition, we introduced the following initiatives:

The Centre for the Study of Pain and Well-Being (led by Pincus) explicitly, brings together researchers from Psychology, Sociology, Management and Law to consider policy-relevant agendas including return to work, long-term pain management and the resource and treatment implications for the NHS and employers. In 2 years, the Centre has already organised three national and four international conferences, secured awards of £566,215 (50% to RHUL) in research income and carried out impactful research (for example, Advising the Department of Work and Pensions on returning people with chronic pain to work in 2019 onwards). In 2019-20, we established a QR GCRF-funded Chronic Pain Southern Africa network led by Pincus, working with the College's Disability and wellbeing GCRF cluster to internationalize further the work of the Centre and potential beneficiaries of the research.

The Health Psychology Research Unit (led by Bradley) collaborated with Health Psychology Research Ltd (Bradley's spin-out company) to design and develop a range of patient-reported outcome measures, for long term health conditions, including diabetes, chronic kidney disease, eye conditions, HIV and others. The measures have been linguistically validated in up to 120 languages. This work involves partnerships with academics, clinical professionals, charities and pharmaceutical companies, extending the awareness and influence of the patient voice in treatment design and service delivery, evaluating new treatments, and increasing understanding of the personal impact of these conditions.

The Allied Health unit diversified its research funding to facilitate applied research partnerships. We expanded into EU industry funding, expanded our charity funding and sustained our consultancy income, which currently supports a range of research and impact-related work. These partnerships helped to bring social scientists and health care professionals into our research teams. We have consolidated further our funding record with the NIHR including transformative Health Technology Assessment grant capture (Bradley, Ellett, Pincus).

### **1.4 Strategies for enabling impact**

Our impact strategy is led and shaped by our strengths in collaboration with other health researchers, clinicians and our relationships with research beneficiaries. We aim to build

innovative partnerships with patient organizations and health charities. Impact is enabled by three strategic approaches at the unit, departmental and School level: 1. Raise awareness of impact by asking staff and student to develop annual research and impact plans as part of the university's Personal Development Review process. 2. Provide impact-related training within the unit/department. 3. Support areas of impact excellence. For our two impact case studies, Research and Innovation provided impact training and administrative support for evidence collection. The unit's approach to impact is epitomised by our two case studies (Langdon on MS cognition and Walker on apps designed as reading aids for people with macular degeneration). Both are the product of long-term professional relationships with relevant stakeholders and a patient-centred commitment to securing public health improvements for patients and communities affected.

The Department of Psychology supports impact excellence by initiating and funding a range of activities that facilitate interactions between researchers and stakeholders. Financial support for developing impact is provided through the Research Initiative Fund scheme administered by the Research Committee, and capacity is provided by acknowledging impact activities in the departmental Research Workload Scheme. The department also provides designated research administrative support for the organisation of impact activities, collating of information and impact evidence, and the drafting of impact-related documents.

Five of the Unit's academics work on our NHS-funded professional doctorate (established in 1997, DClinPsy, Programme Director Macleod, other staff Brown, Evangeli, Kingston, Langdon), and so are in near-daily contact with the NHS via visiting external lecturers, clinical training placements and marking clinical work. This close relationship with clinical practice enables effective collaboration with both service users and other health professionals.

### **1.5 Sustaining an open research environment and reproducibility of research**

As part of the Department of Psychology, Allied Health shares with the Psychology unit of assessment the values of inclusivity, equality, shared endeavour and commitment to the Open Science agenda for transparent and reproducible research. All research outputs are publicly available via the PURE depository (since 2014). In 2017, the Psychology Department established the Open Science Working Group whose core members include Allied Health staff. The group is a member of the UK Reproducibility Network of groups that support best practice for accessible, robust, transparent and reproducible research; it aims to facilitate training and disseminate best practice via local hubs. The Open Science Working Group has hosted a number of external speakers on a range of topics including data sharing, ethics, pre-registration, reproducibility, various statistical approaches, and journal practices.

Two key initiatives implemented in 2017 to support Open Science practices are:

- the requirement for pre-registration for all UG and postgraduate research projects internally, with supervisors encouraged to register them externally (implemented in 2018).
- the implementation of a data transparency requirement of all staff conducting empirical research in the department; this requires data for all published work consisting of data collected after April 1, 2019 to be made publicly available barring compelling reasons to restrict availability.

Staff aim to publish in open access and in formats accessible to service-users or if not possible then preprints are made available in PURE. Bradley and Langdon have published articles in charity publications for patients and professionals (the Macular Society's "Digest" and "Sideview";

the MS Trust's "Open Door"). Bradley also participated in the filming in 2019 of a Macular Society on-line training course for optometrists and other professionals: currently 548 professionals have completed the course. Langdon has made several films (2014, 2018), funded by Novartis and Merck, demonstrating BICAMS administration for trial sites.

All our Unit members follow Royal Holloway's academic guidelines; the Psychology departmental research lead and director of graduate studies work with Allied Health colleagues and PGR students to ensure that the UUK Concordat to Support Research Integrity and code of research ethics is embedded in our working cultures. Training in ethics is provided for student and PGR students (compulsory) and supervisors monitor ethical compliance. Royal Holloway's Ethics Committee reviews all staff and PGR research activity, with certain exceptions where self-certification is permitted.

The Allied Health Unit staff are bound by HCPC and BPS professional guidelines relating to ethical research practise. Most of the projects require National Institute of Health Research Authority (HRA) approval and Allied Health colleagues have developed considerable skill in negotiating this process – which is then used to inform and enhance the research training we offer our research students and ECRs. In addition, Royal Holloway requires research projects to gain institutional approval from their internal ethics committee and Unit members serve as School-level reviewers (Ellett, Evangeli, Kingston).

### 1.6 Future research and impact strategy 2021-2026

Allied Health will be sustained by Royal Holloway's Research and Knowledge Exchange Strategy, and will make significant contributions to two Catalyst Hubs, launched in Spring 2021: Living Sustainably, and Transformative Digital Technologies, Security and Society. We expect to develop four strands:

- In 2022, the College plans to establish a new PGT and PGR teaching and research unit in health, separate from the Department of Psychology, with resourcing and staffing investment to enable the implementation of our post-2021 research and impact strategies.
- *Supporting researcher and challenge-led initiatives.* Nurturing staff and research students in areas that are amenable to more ambitious research-led bids and or scaled-up engagement with health professionals and patient advocate groups.
- *Using our research structures, including the Centre for the Study of Pain to enhance further impact.* Our research groups will develop further workshops, CPD and networking to enable further public sector engagement (for example, prison service, NHS) designed to contribute to the refining of service protocols, target therapy, alter treatment models, mental health service delivery.
- *Working with new catalysts on Living Sustainably and Transformative Digital Technologies, Security and Society to deepen our expertise in digital public health.* Working with colleagues in computer science and information security, we will advance further the possibilities of developing online well-being interventions and digital resources for communities that are likely to be affected by wider public health disruption such as the pandemic.
- *Review our scholarly and operational infrastructure* in 2021-2 so that we continue to support excellent research and national/international collaborations and take stock of the impact the pandemic has had on medicine and disciplines allied to health.

## 2. People

All staff in this small unit of 6 women, 3 men (8.6 FTE) are on permanent Teaching and Research contracts, and three of the four professors are women. Our unit is an inclusive working environment committed to equality and diversity, and in 2016 the Department of Psychology (which includes the Allied Health Unit) retained its Athena SWAN Silver status. Our unit is composed of qualified health professionals (mostly clinical and/or health psychologists) registered with the Health and Care Professions Council (HCPC) and Chartered Psychologists, registered with the British Psychological Society (BPS). Research leadership is provided by School Head Pincus and our two Fellows of the British Psychological Society (Bradley and Langdon).

### 2.1 Staffing strategy and staff development

We are committed to equality, diversity, and inclusion, and monitor gender and other protected characteristics via the School's Equality and Diversity Committee, aligning ourselves with Royal Holloway's strategy of inclusiveness. Our staffing strategy is based on the commitment to maximise the potential of staff and research students by fostering inclusive structures that enable either investigator and/or challenge-led research projects. Mentoring and professional training, regardless of career-stage, are offered to all staff members as part of our commitment to staff development. Promotion is reviewed annually within the Unit, and feedback provided on CVs to all non-professorial staff members, while professors are invited bi-annually to submit for professorial banding review.

*Supporting Early Career Staff.* A three-year probation period exists for new staff, during which the academic colleague who is acting as their probation advisor has regular meetings with them to support throughout this early, crucial stage of their career. All new staff are enrolled on the CAPITAL (Postgraduate Certificate in Academic Practice in Teaching and Learning) training course provided by Royal Holloway's Professional Development unit, which they complete within the normal 3-year probation period. This training is HEA-accredited and qualifies participants for full HEA fellowship. The programme includes attendance at four Advance research workshops.

Early career academics are routinely included as co-investigators on senior PIs' funded projects (for instance, Kingston with Ellet). Our focus on staff support applies equally to PDRAs and this has ensured that 100% of PDRAs secured employment in academia, research and/or clinical work in this REF period (for example Jacquelyn Romaine, Consultant, Oncology Global Medical Affairs at Eli Lilly and Company). The College's research strategy fund (RSF) is used to empower ECRs, to pump-prime research and/or impact-related activity and to support conference attendance. This sits alongside the work that our senior staff in particular do to aid and abet colleagues preparing UKRI and other external grant applications. Dedicated Allied Health support from the College's Research and Innovation Department support grant development, costings and consultancies.

*Policies for Research, Impact Leave and Sabbatical Leave.* Royal Holloway offers a sabbatical leave policy, and all academic staff are eligible to apply for sabbatical leave (one term for every nine non-sabbatical terms served). We offer some flexibility to colleagues where there is a pressing need to pursue time-sensitive research and impact-led endeavours.

Under the College's new flexible working programme, introduced in 2018, colleagues can apply to have their core hours re-set to better fit around caring and childcare responsibilities as well as approved training commitments in particular. This policy is open to all members of staff who wish to alter their working hours for the reasons above and have at least 26 weeks service with the



College (1 colleague in the unit applied for flexible working hours this assessment period). We believe that flexible working and sabbaticals are essential to allowing our Allied Health staff to plan their research and impact-related activities alongside other professional and personal responsibilities. It is also integral to our high levels of staff retention.

*Recognition and Reward.* Staff are rewarded for research and impact-related excellence and this is reflected in professorial and academic staff promotion criteria. Every member of staff is evaluated on four categories: teaching, research, leadership and external engagement. Rather than relying on self-assessment of readiness for promotion (which can introduce inequalities) our promotions review group in the Department of Psychology invites all colleagues to submit their CVs every year and offers recommendations based on the published promotional criteria, including professorial banding.

In this REF period, there were promotions for: Evangeli to Reader in 2017; Ellett to Reader in 2018; and Glorney to Senior Lecturer in 2014. Two professorial banding promotions also occurred in this period (Langdon in 2014 and Bradley in 2018). Pincus was appointed to a senior leadership position in 2019 as the new Head of School of Life Sciences and Environment.

Royal Holloway runs mandatory training on unconscious bias for all members of selection panels, implements policies ensuring equitable treatment for part-time and fixed-term staff members, and maintains a clear and transparent promotion process. The institution also undertakes a comprehensive equality and diversity data monitoring and review exercise every year. Psychology runs regular staff surveys to gather feedback on career development, promotion and reward, flexible working and experience of return to work.

## 2.2 Research students

In the current REF period, we supervised 7.97 PhD students to successful completion. 2 PhD projects were shared with other Royal Holloway departments (Geography and Law), and over 80% of our research students are women. All our PhD students completed within four years equivalent and their funding was a mixture of UKRI, RHUL and learned society sources. Six members of the Allied Health unit were involved in their primary or co-supervision.

*Recruiting Doctoral Students.* Prospective students can apply to Royal Holloway's ESRC-funded SENSS Doctoral Training Centre; AHRC *technē* Doctoral Training Centre; and seek a highly competitive College research studentship, which are match-funded by charity and industry funders. We offer high-level training and skills development programme for all our research students. Post-2021, we will be working with the School to review our recruitment and selection policies to ensure that we actively encourage more Black-British, British-Asian and Global Majority candidates to apply to the Allied Health PhD programme.

Further training and support for our new students is at school and College level. The School has an active research network of research students and ECRs (there is a Yammer group that is supported by R&I). This ensures that research students and ECRs are better represented on the School's Research Committee and currently two serve as committee representatives. The Royal Holloway Doctoral School was relaunched in August 2019 to provide a single point on campus to support our research student body. The Doctoral School provides additional opportunities to meet and share ideas and experiences across our Schools.

*Support and Monitoring.* The Department of Psychology's PGR Lead has overall responsibility for managing the departmental Postgraduate Research (PhD) programme and sits in Departmental Executive committee. The PGR Lead together with the Deputy Lead are responsible for policy and governance regarding admissions and funding for prospective students, for supervisory arrangements, academic progression (annual reviews, upgrades), the provision of department-specific research training program and for ensuring students' pastoral welfare. They are members of the department's Research Committee and represent the department at School-level Research Student Oversight Committee. The SLES holds a minimum of three Student-Staff committees (previously held at Department level), chaired by a PhD student representative. In these meetings, issues are raised for discussion and actions may be taken to enhance the support for students and the PhD programme. ECR representatives also inform the work of the School Research Committee (as noted above).

We provide strong, complementary and supportive PGR supervision. Students have a lead supervisor, a second supervisor and a PhD advisor for academic and pastoral care. Supervision skills are developed through formal training of new staff, who are encouraged to take on a PhD advisor role and may supervise PGRs with an experienced second supervisor (e.g. Departmental PGR induction led by the PGR Lead, College CAPITAL supervisor training). Staff are required to attend broader College training on equality and diversity, including sessions held within the TaLIG (Teaching and learning interest group) series. In the most recent (2019) PRES survey, 95% of respondents indicated that: 'my supervisor/s have the skills and subject knowledge to support my research' and 'provide feedback that helps me direct my research activities' and 100% 'have regular contact with my supervisor/s appropriate for my needs'.

We have a clear annual review process chaired by PGR Leads in which the student, supervisor(s) and advisor attend. The meeting examines how well the supervisory team is working, the progress of the student, the timeline for completion, career development opportunities and any training skills required. A first annual review is scheduled after approximately nine months of study and the formal upgrade meeting after 16-18 months (all of our PGR's have successfully been upgraded since 2014). A second annual review is held after 24 months and a further third review, or mock viva, at 33-36 months, and regular monitoring thereafter up to submission.

*Skills Development and Careers.* There is a shared commitment to enhancing the training of doctoral (PhD and DClinPsy) and post-doctoral researchers so that they follow the professional standards expected of clinical research and research governance. All doctoral students have formal teaching on the ethical aspects of clinical research. The DClinPsy ethics training is accepted by the NHS to be equivalent to "Good Clinical Practice" training under their Research Governance Framework. The DClinPsy alone has typically 30 clinical thesis projects each year; the majority are NHS collaborations requiring the NHS's Health Research Authority approval.

Our research-led partnerships enable our PhD students to start their careers working with external partners (such as NHS England) and participate in inter-disciplinary PhD projects such as information security and patient data storage supported by the College's Leverhulme Trust-funded Magna Carta Doctoral Training Centre (2014-2017). Category A staff in the unit supervise DClinPsy theses and this encourages cross-disciplinary scholarship and applied research. Our DClinPsy Programme includes a suite of external clinicians lecturing every year, NHS training placements and clinical research collaborations. Our students and supervising staff work with an array of interdisciplinary partners, including pharmaceutical companies, medical doctors, statisticians, charity staff, patient advocates, clinical psychologists, occupational health professionals, physiotherapists, health economists, neuroscientists, psychiatrists, and psycho-

therapists as well as in the fields of social policy, law, nursing and social policy. This professional network is supported further by invited lectures and workshop participation involving our PGR and DClinPsy students.

Our students attend in-house workshops for free or at reduced cost (e.g. grants from ESRC, BBSRC, Tobi Pro Insight and Acuity Intelligence funded a series of two-day 'Real-world Eye-tracking' workshops between 2015-2019) and take advantage of our specialised MRI programme run by our MRI Research Fellow (Ayan Sengupta). Students are also regularly consulted on their support needs and this led to additional training sessions (e.g., the department funded external workshop leaders Data Camp to deliver R-studio training). The success of the skills development programme is evidenced by the fact that our students in this unit report that their research skills develop during their training programme (95% of our research students in the 2019 PRES survey agreed that their abilities in critical analysis and evaluation of findings had improved).

Research students in Allied Health are members of Department of Psychology's Open Science Working Group. Research students are required to promote their research activities via their RHUL PURE pages and to ensure that any research output is made publicly available via the institutional repository. In the case of any copyright restrictions, the final accepted manuscript version is made public unless there is a publishing embargo in place. We have used the success of the Open Science initiative to embed a shared research environment for our PGR students, giving due weight to research practices and values such as open access publication, knowledge-exchange, professional networking and data sharing and transparency.

Our PhD students are encouraged to publish in high quality journals such as *British Journal of Pain* and *Value in Health*. Professional bodies (for example) have recognised the quality of our research students and awarded funding to support international conference attendance alongside our DClinPsy candidates. In this REF period, our DClinPsy students published 78 papers in academic and professional journals and our PhD students published 37 articles in 33 academic and professional journals.

### 2.3 Equality and diversity

We have a proactive approach to supporting the career development of all staff at all levels, through mentoring, training and the establishment of an inclusive research environment. Our approach is to embed the issues of equality and inclusivity in all our processes. In recognition of this, the previous Athena SWAN role in the Department of Psychology has now been expanded to an Equality, Diversity and Inclusivity Lead, which involves chairing a committee that meets regularly to consider relevant issues for colleagues in both Allied Health and Psychology. We recognise that there is more work to be done in terms of recruiting B.A.M.E. category A staff, and all staff have undergone mandatory training on unconscious bias (2019) and participate in recruitment and selection training if they are involved in any formal appointment panels. As part of our REF preparations, REF leads and departmental research leads have had to follow the College's Code of Practice regarding REF 2021, including working with staff to identify relevant special circumstances. As health professionals, Allied Health Unit Staff are bound by HCPC and BPS guidelines relating to equality and diversity.

*Embedding Equality, Diversity and Inclusivity in Everyday Practices.* We have aimed to increase inclusivity through initiatives such as wearing rainbow lanyards to indicate support for LGBTQAI students and colleagues, as well as a "get to know your department" induction session for first



year undergraduates in which staff from different ethnicities and backgrounds share their experiences of academia. The Department is proactively engaged in championing these initiatives, for example, by supporting empirical research on the impact of our lanyard intervention and the experiences of widening participation and BAME students, the commissioning of gender-neutral toilets and the provision of free sanitary products.

*Supporting Staff Well-being.* The College operates a flexible working policy and offers flexible working arrangements to enable work-life balance with priorities such as childcare, health or disability, transport. Meetings are scheduled between core hours (10am-4pm) and staff can apply to work flexibly including the hours they work, times they work and working from home. To support staff outside of formal probation, or annual review processes we have introduced a new mentoring and well-being scheme whereby staff can request mentoring on any aspect of their career development (including career progression or for specific circumstances such as return from parental leave, part time working, support for staff with protected characteristics).

All pregnant staff are eligible for up to 26 weeks of ordinary maternity leave with a further 26 weeks of additional leave. A shared parental leave policy operates to enable eligible mothers, fathers, partners, and adopters to choose how to share time off work during the first year. Within the DClinPsy Programme, there have been 11 maternity leaves across 5 staff in this REF period (including 2 each for 2 of our academic staff), all staff have returned to work and continue in post (and have been supported with any application for special circumstances in this REF period). Staff returning to work from a period of maternity, adoption, shared parental or caring leave can apply for a sabbatical to help them focus on their own research. All DClinPsy candidates who took maternity leave in this REF period returned and successfully completed their DClinPsy (professional qualification), evidence of the staff's commitment to supporting equal opportunities. In 2019, a British Psychological Society accreditation panel commended the DClinPsy for its Diversity Champions initiative.

*Encouraging Ambition.* Staff applications for funding are supported by colleagues in Research and Innovation and by departmental/School-level research committees and groupings. The Department of Psychology and the unit monitors grant application and grant outcome data via RHUL's dashboard system, which enables relevant departmental research leads to monitor equality and diversity. Throughout this REF period, female academics in the unit submitted more grant proposals of all kinds and enjoyed higher levels of success than their male colleagues.

*Supporting Career Pathways.* Royal Holloway is committed to the Concordat to Support the Career Development of Researchers. Staff and research students are eligible for College's mentoring scheme, which was designed with support from the UK Resource Centre for Women in Science, Engineering and Technology, and which pairs individuals with trained mentors outside their respective department. Members of staff are invited to participate in further research development programmes (for instance, On-Track, Mandela for BAME staff and research students, Springboard, Aurora Leadership and Women Enhancement programmes for female research and related staff), which address a range of issues such as public engagement, working on KE, and project management. In this REF period, 5 staff in the Allied Health unit participated in career development support initiatives, such as senior leadership (Pincus, appointed Head of School in 2019); mentoring (Langdon, appointed REF lead in 2019); Women's promotion programme (Ellett, promoted to Reader in 2018).

The unit has a close relationship with the College's Research and Innovation Department, which tracks funding opportunities. R&I offers a comprehensive support service including grant selection, costings, editing drafts and implementation of successful awards. Staff are encouraged,

with suitable permissions, to share successful research applications or speak in public about how they approached the research grant application process.

*Objectives 2021-2026.* We will continue to consult with our BAME colleagues and research students about how we improve support and acknowledge diversity within our unit of assessment and allied Departments such as Psychology. We anticipate a far greater usage of peer-to-peer support and relevant external networking groups. We are also committed to further training and support in areas such as mental health recognising how stressful the HEI environment is. We will continue to work closely with Royal Holloway's Careers Service to ensure that our PGRs are supported in terms of career destinations/opportunities both within and beyond the academy. Finally, we will be encouraging our senior members of staff to continue to support college-wide mentoring and professional development schemes such as Aurora and Springboard.

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

Following REF2014, Royal Holloway invested in its research support infrastructure, including new posts in Research and Innovation to assist with funding schemes, impact and knowledge exchange, and responses to major strategic funding and KE priorities. The College appointed an Impact Manager, a Research Development Manager specializing in life and environmental sciences, and a Global Challenges Strategy Manager with a life science background.

The unit's income, infrastructure and facilities are integral to our research, impact and knowledge exchange activities. Our unit seeks support to make grant applications to a diverse number of funders. Regardless of size, we support our staff through rigorous internal peer review and grant writing workshops. The unit's research spend since 2013/14 has been £3.1M.

#### **3.1 Strategies for generating research income and funding**

Research income is central to the operationalisation of our research strategy. Staff are encouraged to apply to a diverse range of sources that best suit their research and impact-related portfolios, including UKRI, charity, industry and public health funders. This strategy has enabled us to secure a range of grants in terms of funder and size. The Allied Health Unit was awarded £3,085,831 in research funding for this REF period. Funding was obtained from a variety of sources including substantial awards from UK public health authorities and government (£681,045), UK and non-EU Industry sources (£1,809,405), UK Charities (£182,000) and international research councils (HK\$771,300).

Research funding is used in four ways to deliver our strategic vision for Allied Health at Royal Holloway. 1. Income that supports research impact. For example, Langdon secured £336,000 from the pharmaceutical industry to develop an iPad version of a cognitive test for patients with multiple sclerosis and £118,000 to develop the original assessment of cognitive impairments in MS, both of which underpin this impact case study. 2. Allied Health has secured research income from pharmaceutical companies to enable work that directly benefits vulnerable communities. Evangeli received funding (£275,000) from ViiV Healthcare and GlaxoSmithKline for a randomised feasibility trial of HIV disclosure in young people with perinatally acquired HIV, and a further £250,000 from the same funders for a study of adolescents with HIV in Botswana. 3. Research income continues to enable our long-term work on expensive and costly public health challenges such as chronic pain and disease treatment. In addition, a number of smaller grants enable time-sensitive, patient-centred studies to occur. Examples include: MS Trust (Langdon), MS Society (Langdon), Macular Society (Bradley); St George's University of London Charitable

Trust Fund (Bradley); Sentebale and African Collaborative HIV/AIDS Partnerships (Evangelini); Lucy Faithfull Foundation (Glorney); and The Disabilities Trust (Langdon).

Our research and knowledge-exchange activity continues to be made possible by in-kind support by our partners, professional service provision, and research training engagement and collaboration (e.g. Northern IAPT practice-research network, training workshops for Merck and UK MS Trust, professional lectures for executive groups such as Celgene). This reflects our commitment to co-produced, co-designed and co-funded research (some of which is in-kind) with an array of partners including charities, many of whom are dedicated to patient advocacy. To contribute to the unit's sustainability, the College's Research Strategy Fund supports new research projects, research impact and ECR research project development. For example, Pincus received funding in 2018 for a network of patient advisors addressing chronic pain as part of a commitment to ensure that patient wellbeing was enhanced.

### **3.2 Organisational infrastructure.**

Research and Innovation disseminate policies on funding opportunities, research integrity, data management and mechanisms for enabling open access and the promotion of outputs. The Allied Health unit is supported by dedicated staff in research finance and intellectual property rights, who assist with Intellectual Property agreements and post-award grant management.

### **3.3 Operating and scholarly infrastructure.**

RHUL has undertaken major infrastructural investment in this REF period. In 2017, £57 million was invested in a new library and exhibition space, the Emily Wilding Davison Building. The Library is fully accessible and offers dedicated seminar and study space for researchers, including research students. Staff in the unit are based in Egham but also use the refurbished facilities in central London in Bedford Square (and rooms in University of London's Senate House). Both venues are used for research interviews with patients for whom the journey to Egham was too taxing, improving access and comprehensive recruitment. Dedicated library and information management colleagues advise and support colleagues on educational resources, open access, and the use of digital platforms. In this REF period, the College and department spent around £450,000 on developing laboratory spaces and equipment in the Department of Psychology, including VR technologies that are used in our research projects.

### **3.4 Addressing equality and diversity.**

All staff have equal access to funding opportunities and are supported by the College's Research and Innovation team that helps with grant planning, additional peer reviewing and financial management. Our research is supported by a rigorous system of internal peer review process for grant applications. Each grant has at least one reviewer (two for UKRI proposals). In 2015, a new quarterly Research Initiative Fund was established, for colleagues without external Research Contract Income (often ECRs) addressing pump-priming funding, conference travel and publication costs. The funds are reviewed by the members of the Research Committee and the total amount awarded since 2015 exceeds £85,000, (average of £18,000 p.a.).

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

Allied Health at Royal Holloway committed to social and health justice, and public service. Our staff serve on professional public health bodies and charities as chairs, members and trustees. From 2013 to 2020, Langdon has been a Trustee for the MS Society and has served as chair of the judging panel on Recognising Quality in the Delivery of Services in Multiple Sclerosis (2019). Bradley was a finalist for the 2018 EU Prize for Women Innovators, and Pincus was awarded an 'Excellence in Clinical Inquiry Award' by the American Physical Therapy Association (2017). Our commitment to high ethical standards has sometimes involved difficult personal and professional decision-making, such as resigning from global taskforces on chronic back pain because of controversial funding links with a pharmaceutical company in 2020. Members of the Unit are widely recognised for their scholarly and professional contribution, and for their academic leadership in health psychology.

**4.1 Research collaborations**

Our unit works with research and knowledge transfer partners, patient advocacy groups, public sector organizations, pharmaceutical companies, charities, and academic collaborators around the world. Investing and supporting collaboration led to the establishment of the Centre for the Study of Pain in 2018. Launched with the support of other departments at Royal Holloway, the Centre was designed to support innovative and cross-disciplinary research and KE. Under the academic leadership of Pincus, it brings together academic and health care professionals. It supports workshops and networking events to facilitate and encourage PhD and post-doctoral led projects.

Our approach to collaboration and partnership is strategic and based on identifying *four types of relationships*. 1. We contribute to health researchers and disciplines allied to health. This includes substantial professional service to training and knowledge exchange activities, academic journal editorship and board membership, expert lectures, and research group leadership. 2. We organised and host research networks and seminar series that actively engage professional stakeholders in industry, government, civil society including patient groups, and professional public health bodies and charities. 3. The Allied Health unit produce policy-relevant and public-orientated research findings that inform public health challenges. 4. Finally, our academic contribution is enabled by our ability to work as investigators on projects that intersect with industry and/or third sector partners such as Glaxo SmithKline (Bradley); ViiVHealthcare and GlaxoSmithKline (Evangelini); and Merck AG and Novartis AG (Langdon). Our work with external parties underscores our impact strategy and commitment to building sustainable relationships that deliver positive public health outcomes.

**4.2 Relationships with research users, beneficiaries or audiences**

Allied Health at Royal Holloway is committed to working with diverse communities and publics. Our strategy has been to work directly with patients and health care professionals; inform and shape professional practice and develop public engagement strategies designed to make our research findings as accessible as possible. Beyond the academy, for example, we contribute to the enhancement of the professional and educational knowledge base of health professionals. Our staff foster close partnerships with patients and service users, and our senior research leaders ensure that clinical research involves both from a very early stage. The patient reported outcome measures elicit the views of patients (Bradley). Langdon publishes with service user co-authors (*MSARD, Neurology and Therapy*) as has Bradley (*British Journal of Ophthalmology*). A

further demonstration of our inclusivity is working with researchers who have lived experience of chronic health conditions, as patients or relatives (for instance, rheumatoid arthritis and multiple sclerosis (Macleod), dysautonomia (Langdon) and psychosis (Ellett).

*Global partners.* Bradley's Diabetes Treatment Satisfaction Questionnaire has been linguistically validated into more than 120 languages with her many other measures similarly amassing large numbers of linguistic validations. Langdon's BICAMS is clinically validated in 30 countries (18 peer review published national validations so far). Bradley and Langdon are established international experts with extensive steering group memberships of multinational pharma trials (e.g. Langdon with Merck AG). Pincus (with Evangeli) has led on an HIV and pain management initiative with South Africa (University of Cape Town and University of Witwatersrand). Evangeli is leading on a project in Uganda and Botswana to develop and evaluate an HIV onward disclosure intervention for adolescents. Ellett is collaborating with colleagues at La Trobe University in Australia on experimental work on the aetiology and maintenance of paranoid beliefs and collaborating with colleagues at the Chinese University of Hong Kong on an RCT of group mindfulness for paranoia and developing mindfulness for psychosis in their healthcare system. This broad spectrum of high-profile activity also demonstrates the international eminence of Allied Health unit academics, invited and funded to collaborate as global experts, able to engage and lead health researchers and providers internationally.

#### **4.3 Contribution to the economy and society**

Our interdisciplinary working model, exploring and validating new strategies for involving service users, health professionals and others in a deep and meaningful way will continue to inform our research and impact goals. For example, sharing research insights as inviting plenary speaker at the 2020 Wellcome Frontiers "Centring in on Pain" Expert Meeting (Pincus).

All members of the Allied Health Unit are working to research and change health professional knowledge and practice. For example, Evangeli contributed to national antiretroviral adherence guidelines for young people with HIV through membership of HYPnet in 2014; was involved in drafting HYPnet's response to the draft NHS PrEP guidelines; contributed to the UK Parliamentary Post Note on Risk in 2017; and his work is cited in the 2018 British HIV Association guidelines for the management of HIV infection in pregnant women. Bradley's measures have been translated into over 120 languages and led to the development and use of Dose Adjustment For Normal Eating (DAFNE). This NICE (National Institute for health and Care Excellence) recommended guideline is widely used in the UK and saved money for the NHS. Langdon's MS cognitive assessment has been recommended by the American Academy of Neurology and 11,000 patients are assessed in clinics around the world every year. Pincus has convened the international consensus group to establish which factors and measures should be included in prospective studies of persistent back pain.

Our staff regularly speak to health professional groups (ranging from informal workshops and seminars to major international keynote lectures), directly engaging with many thousands of health and related workers every year. Examples include: Bradley to the British Transplant Society in 2017; Evangeli to the Royal Society of Medicine 2016; Langdon to BICAMS; Pincus to the 2<sup>nd</sup> Watson International Headache Symposium 2020. These close partnerships with external health organisations and workers, and the resulting recognition for the unit, have created an environment where impact is integral to our research environment.

The Allied Health unit at Royal Holloway has a well-established record of providing professional service to public health bodies and their service delivery. This includes working for health



networks such as the Associate of Northern IAPT Practice Research Network, based in Sheffield University (Brown); Surrey, Kent and Sussex NHS Clinical Research Network (Ellett); HIV clinical service at Chelsea and Westminster NHS Foundation Trust (Evangelis is a 0.2. colleague at the Trust); Her Majesty's Prison and Probation Service, the College of Policing National Offender Management Service, the Police Federation, and the Metropolitan Police (Glorney).

Langdon ensures that the projects she co-chairs (BICAMS and MS21) are freely available to professionals and public alike. She has published in Research Outreach, a free online public science journal. Pincus has made public service videos on chronic pain and one video 'Pain and Me' available on YouTube has been viewed over 43,000 times and has been shown to patients around the world (with local subtitles added). An online well-being self-help intervention was selected as a Case Study for the What Works Centre for Well-being and is now adopted for use by social workers in eight local authorities in London (Macleod).

Our work has been cited in health care professional guidelines and parliamentary enquiries: SHAPED Consortium 2020 guidelines on visual hallucinations (Bradley); NICE Guidelines for Psychosis Management (Ellett); 2018 British HIV Association guidelines for the management of HIV infection in pregnant women (Evangelis); NICE pain guidelines (Pincus); the House of Commons Health and Social Care Select Committee's Report on Prison Mental Health (Glorney, 2018); cognitive assessment measures recommended by the American Academy of Neurology's 2016 MS Quality Measures (Langdon).

#### **4.4 Contribution to the sustainability of the discipline**

Our teaching and research structure actively contribute to sustainability. The Department of psychology led on the Women in Science Database, initiative in collaboration with the British Psychological Society, and British Neuroscience Associations, with the aim of enhancing the visibility of female scientists in the UK. Launched in 2018, it contains the research details of about 500 women in psychology and neuroscience and is used to increase the representation and influence of women in all scientific activities, including speaker representation (15,000 page views from 71 countries to date).

Our long-running and widely respected DClinPsy programme staff have over 100 active research collaborations with NHS colleagues at any one time (largely relating to the 90 DClinPsy thesis projects). Our DClinPsy and all research student and post-doctoral projects involve formal collaborations with NHS Trusts or other clinical services, or international health providers. These total over 200 projects (e.g. 'A measure of eating attitudes in cystic fibrosis' with partners at Great Ormond Street Hospital and 'Treatment of survivor guilt after trauma' in partnership with Springfield Hospital Trust) in this REF period. A significant proportion of this work includes engagement with charities (Cochrane, Versus Arthritis), particularly for recruitment of our students and post-doctoral researchers (Bradley, Evangelis, Glorney, Kingston, Langdon, Macleod). Service user involvement is a requirement of clinical research and the unit's work demonstrates particular commitment and expertise in this area.

Our staff are committed to making their research findings accessible to professional and public audiences (for example MacLeod with What Works – The Communication Trust 'health staff well-being' with Jeremy Oliver; Ellett with *Guardian* on safety of London cyclists, both 2018). This is enriched by our strong reciprocal relationships with non-academic partners that inform our research and knowledge exchange projects from inception to completion. It allows us to tailor our contribution to the wider economy and society, both nationally and internationally, via impact on knowledge, policies and professional practices.

#### 4.5 Contribution to the research base

Our staff actively contribute to the wider research base by engaging with a diverse range of professional activities including journal editorships and editorial board membership, research panel engagement and service to professional bodies. This has been recognized by awards such as JOSPT George J. Davies – James A. Gould Excellence in Clinical Inquiry Award (Pincus) and as a finalist for the EU Prize for Women Innovators based on her work on patient-reported outcome measures (Bradley in 2018). In this REF period, we published 248 outputs with our external partners, and these accrued 2763 citations.

*Journal Editorship and Editorial Board Membership.* Editorial appointments (five staff served as editors during this REF period including *Frontiers in Psychiatry* (Brown). Editorial board memberships include Bradley (Health and Quality of Life Outcomes); Ellett (*Psychology and Psychotherapy*); Evangelini (*BMC Health and Services Research*); Glorney (*Forensic Update; International Journal of Forensic Mental Health*); Kingston (*Journal of Contextual Behavioural Science*); Langdon (*Multiple Sclerosis and Related Disorders*); and Macleod (*Cognition and Emotion, Mental Health Religion and Culture, International Journal of Happiness and Development*).

*Panel Membership.* Examples include: Brown serves the International Taskforce RelApose prevention of depression (ITFRA), Kingston scientific committee for the British Association for Behavioural and Cognitive Psychotherapies, Association for Contextual Behavioural Science and European Association for Behavioural and Cognitive Therapies; Langdon serves the SE England NIHR Research for Patient Benefit Panel; Pincus serves as panel member for fellowships, steering committees for programme grants and acts as Chair of the Eurospine's Patient Line and European Federation for the Study of Pain.

*National and International Bodies.* The unit works with many national and international pharmaceutical companies, research organisations and charities. Bradley co-chaired the steering group of a 9-country study funded by Astra Zeneca and Bristol Myers Squibb and collaborated on two UK-wide research programmes (ATTOM and SHAPED). Pincus serves as member and conference committee for the European Federation for the Study of Pain (2020). Langdon continues to work with major companies such as Merck, Novartis and Bayer.

Our research findings have been recognized by professional journals such as the *Journal of Neurology, Neurosurgery and Psychiatry* (Bradley) and gold medal for the most clinically relevant research in the *Journal of Orthopedic and Sports Physical Therapy* (Pincus). Other forms of professional recognition include numerous honorary appointments for example: Honorary Consultant in IAPT primary care psychotherapy and Homerton University Hospital Foundation Trust (Brown); Honorary Professor in the Preventative Neurology Unit within the Wolfson Institute, Queen Mary University of London (Langdon); and Honorary Consultant Clinical Psychologist for Camden and Islington Mental Health Foundation Trust (Macleod). MacLeod's work on well-being resulted in him being invited to write the editorial for a 2020 themed issue of *World Psychiatry*, one of the highest ranked medical journals in the world (Impact factor = 34) and his 2017 OUP research monograph, *Prospection, Well-being and Mental Health*, received Highly Commended award from the British Medical Association in 2018.