

<b>Institution: Kingston University</b>
<b>Unit of Assessment: 4 – Psychology, Psychiatry and Neuroscience</b>
<b>1. Unit context and structure, research and impact strategy</b>

### a) Unit Context

UoA4 is located in the Department of Psychology, within the School of Law, Social and Behavioural Sciences. Psychology was established at Kingston in 1996 and received British Psychological Society (BPS) accreditation in 2001. The Unit is comprised of 19 staff (18 FTE) including 3 Professors and 3 ECRs. Since REF2014 the Unit's research activity and productivity have been driven by the appointment of research-active staff, an emphasis on PhD student recruitment and completions, and investment in research support. This growth is evidenced by the steep rise in external grant income, more than 6-fold between REF cycles, from £35K for RAE2008, to £214K for REF2014, to £1,392K in the current census period. The department reported no PhD completions for RAE2008 and 2 completions for REF2014. In the current census period, 16 students (plus 1 wholly overseas) completed their PhD, and 2 students will defend their thesis in the first half of 2021. The challenge has been to maintain this growth and enhance the quality of the research. Six key strategic aims that are designed to meet this challenge are discussed in (c) below.

### b) Unit Structure

Research is managed by a chair-level appointment (Director of Research, DoR) and organised into four research groups: *Clinical and Applied Behavioural Research*; *Art, Cognition/Creativity and Emotion*; *Developmental Psychology*; *Social Psychology*. Staff and PGR students are affiliated to at least one of these groups; groups in turn are led by a senior researcher. Research groups must be approved by the School Management Group and there is a role descriptor for group leaders; the groups are subject to regular review. The research groups primarily support researcher development and provide peer review, specifically in relation to manuscript preparation by ECRs, the development of funding proposals, and the realisation of impact. Meetings are timetabled to prevent clashes with teaching. The UoA also hosts **Back's Developing Mind Laboratory**, **Felisberti's Emotion, Cognition & Behaviour Laboratory**, and **Vallée-Tourangeau's Creative Cognition Laboratory**. Details of group and laboratory activities and achievements are given in section 4a. Interdisciplinary research is supported by the involvement of UoA staff with a University Research Centre of Excellence based in the School, the *Centre for Research on Communities, Identities and Difference*. The Unit also works in close collaboration with researchers from the School of Life Sciences, Pharmacy and Chemistry. For example, Petróczi (Professor of Public Health, UoA3) works at the intersection of psychology, sports science and public health to achieve impact for the Unit, and **Terry** has worked closely with Professor Mark Fielder (Professor of Medical Microbiology, UoA 3) on recent COVID-related research.

### c) Research Strategy

Six strategic aims underpin efforts to consolidate and sustain the growth achieved over the last 10 years: (1) enhance impact and build research networks; (2) foster an inclusive research culture; (3) grow PGR numbers; (4) normalise capture of external research funding; (5) adopt open science practices; (6) invest in infrastructure.

1. *Enhance Impact and Build Research Networks*. The Unit's core is composed of mental health researchers whose work often translates into actionable recommendations to improve people's wellbeing across the lifespan. This core group has had the most success in securing external funding (ESRC, the Fetal Medicine Foundation, QNRF, NIHR, the Nuffield Foundation, WADA, the

International Olympic Committee, the British Academy) and in translating research into impact (see section 1d.)

Key support for the development of collaborative, interdisciplinary research by the UoA is the Centre for Research on Communities, Identities and Difference (CResCID), a University-accredited Centre of Research Excellence (2016). CResCID benefitted from the creation of the School of Law, Social and Behavioural Sciences in 2017, and researchers from UoA4 are key contributors; **Samara** is a co-leader of the centre. Its focus is on multi-disciplinary research and collaborative activity across fields within the social sciences that otherwise rarely work together to produce innovative research. Activities bring together psychology researchers with academic colleagues from departments across the School: Sociology; Criminology; Politics and International Relations; Economics; and Law. The three main research themes are: (i) social justice, inequality and security; (ii) migration, economic development and international human rights; and (iii) improving health and wellbeing across communities. Collaborative research between the Departments of Psychology, Criminology and Sociology has explored, for example, the impacts of community division and trauma on mental health (**Samara**), community-level interventions to address alcohol misuse (**Terry**), social care provision in a cross-cultural context (**Vandrevala**), and how religious identity arises and influences behaviour (**O'Dwyer**). The Department of Psychology has recently launched a popular BPS-accredited MSc in Forensic Psychology, and the emerging team of researchers in forensic psychology form natural synergies with colleagues in the Departments of Criminology and Law to develop novel research-informed interventions (**Theobald**, **Livanou**, **Tapp**). CResCID has also served as a focus for links between some of these collaborative projects and research projects in the Joint-Faculty of Health, Social Care and Education (including externally funded work by **Vandrevala** in collaboration with St George's, University of London). CResCID offers pump-priming awards of up to £2,800 for members to develop collaborative projects within or outside of the Centre.

The School organises, twice a year, research awaydays to foster interaction between researchers from across the School. Additionally, every year since 2014 the UoA has contributed to the organisation of a School-wide event ('Themed Week') which addresses a specific interdisciplinary research theme agreed by the School Research Committee (e.g., *Mental Health in Challenging Times* in 2019); all teaching is suspended to allow for a full, week-long programme of presentations and workshops led by internal and external researchers, practitioners and policymakers. Building on the last themed week, the School also launched a series of public lectures, workshops and panel discussions extending from 2019-20 entitled *Conversations about Mental Health and the World We Live In*, organised by **Nikcevic**. In support of World Mental Health Day in 2018, **Vyas** organised a department-led symposium with contributions from MIND and regional wellbeing services. Other research networking events are further described in Section 4.

2. *Foster an Inclusive Research Culture*. Staff are encouraged to develop their research profiles at all stages of their career, supported by Kingston's academic career development framework known as 'Domains'. The research domain has clearly articulated standards, expectations and quality thresholds at each career stage. Staff agree their research domain in discussion with their line manager through annual appraisal. Those with a research domain of 30% or more have been identified as having significant responsibility for research as outlined in the University's REF Code of Practice; in UoA4, 66% of all eligible staff have significant responsibility for research and are research independent.

School policy requires that at least one day per week be kept free from teaching commitments and, for those with a research domain, dedicated to research. The teaching curriculum is reviewed to ensure that it is research informed: wherever possible, staff are expected to leverage their own research activity for pedagogical purposes. Our efforts to support early career researchers to ensure that they contribute to and enhance our research productivity are described in Section 2a.

3. *Grow PGR Numbers*. The Unit has built PGR numbers by securing external funding, by receiving Kingston University-sponsored studentship awards (5 since 2014) and by supporting self-funding PGR students through paid teaching/research work wherever appropriate. To ensure that

growth is not compromised by poor progression rates, a revised and more rigorous application and interviewing process was put in place during the 2015-16 academic year (see Section 2b below). Also, since 2014, PGR students have been required to complete an assessed, 60-credit psychology-specific research training programme (PS7012 Research Skills in Psychology) in order to transfer from MPhil to PhD registration (see Section 2b). Popular L7 programmes — MSc Behavioural Decision Science, MSc Child Psychology, MSc Clinical Applications of Psychology, MSc Psychology (Conversion) — have also served as feeder routes for PGR recruitment.

4. *Normalise Capture of External Funding.* The UoA adopts the School policy that all FTEs with a domain in research should make at least one application for external funding per annum; targets for the level of research income sought are determined by experience. The School has implemented a peer-supported, competitive semester-long sabbatical scheme, primarily for the preparation of substantial funding applications; 1 sabbatical per annum has been awarded to researchers in UoA4 since 2014 (2 in 2018-19). One of these (2016, **Samara**) led directly to an award as PI of U\$D720k, from the Qatar National Research Fund (QNRF) of which U\$D89k was direct to Kingston. In the current census period, 118 bids for external income have been submitted by 24 different members of staff, with a success rate of 20%. Draft proposals are submitted to an internal peer review college and detailed feedback is provided to help strengthen the proposal. Researchers must address the feedback, and compliance is monitored by the Research, Business & Innovation (RBI) Directorate.

5. *Adopt Open Science Practices.* Kingston psychology researchers acknowledge that the reliability, accuracy and reproducibility of research are best achieved by increasing transparency at all stages of the research cycle, namely by engaging in open science practices. Kingston Psychology is part of the UK Reproducibility Network. An Open Science Roadshow was inaugurated during the 2019-20 academic year to disseminate open science practices; the core principles are also woven into the research methods curriculum for PhD students in the Department of Psychology (through the mandatory training, PS7012 Research Skills in Psychology). Training sessions on open science are also provided centrally (via the Graduate Research School (GRS), tailored to PGR students and ECRs in particular). **Zloteanu** is a Centre for Open Science Ambassador. **Vallée-Tourangeau** supervises a doctoral project (by Emma Henderson) for which all of the empirical work has been published as registered reports (in *Collabra*, *Psychonomic Bulletin & Review*, and the *Journal of Cognition*), one of the first such PhD theses in the UK. Henderson was supported by a full university studentship, and regularly presents on pre-registration at research training events hosted by the GRS. In collaboration with other Kingston researchers, **Vallée-Tourangeau** has also presented on the challenges facing psychological science and on open science practices at the annual faculty conference.

In addition, making research outputs widely available reflects the institution's commitment to raising the profile of Kingston University research, increasing the potential for research collaborations, and making the results of research more accessible to the public. The University has adopted a green approach to open access: researchers self-archive their research outputs in the University's Research Repository. The University provides funding for article processing charges associated with gold open access; this is additional to the RCUK contribution to article-processing charges for RCUK-funded work. Applications for gold open access funding are reviewed by the Faculty Associate Dean for Research to confirm suitability and compliance with the University's policies. All requests from UoA4 to date have been approved.

Authors of journal articles are required to ensure that their publications include a statement describing how and on what terms the supporting data may be accessed. The University has developed a Research Data Management Policy which supports staff and research students in making their completed research data openly available for re-use unless protected by appropriate exemption or exception.

Library and Learning Services (LLS) provides advice to researchers on Open Access procedures and supports researchers using the Research Repository. The RBI office provides guidance on individual funder policies including grant terms and conditions and REF Open Access. The

University's policy is reviewed on an annual basis, or when necessitated by external policy changes, by LLS and RBI. Proposed amendments are reviewed by the University Research Committee.

6. *Invest in Infrastructure.* The University invests its QR income based on a needs analysis and on plans related to UoA requirements. Between 2015-18, the University has supplemented this provision with over £1M, the majority of which has been invested in supporting the development and transformation of research areas. UoA4 received Research Transformation Funding for 2017-2019 to strengthen infrastructure and technical support. The UoA invested in recruiting a postdoctoral research associate, (1) to disseminate technical expertise relating to the use of research equipment that was acquired over the last 5 years, in particular Biopac, Eyselink and EEG; (2) to transfer knowledge and build capacity relating to programming skills for experiments (Matlab, Eprime, Experiment Builder); (3) to develop and implement an online testing platform for conducting experiments remotely. A web-based suite of psychometric tests was created that is available to all staff and PGR students. The School has continued to support the postdoctoral researcher position from 2019 to the present. Section 3b provides more details on infrastructure investment.

#### d) Impact Strategy

The Unit's impact strategy is centred on (i) achieving impact from its work in the areas of health and wellbeing, building on national and international collaborative links; and (ii) implementing research-led changes in practice through developing long-term relationships with regional community organisations in London and the Southeast. The impact strategy is supported by a faculty-facing Impact Development Manager, part of the Research, Business and Innovation (RBI) team, who provides assistance in impact development, evidence and evaluation.

(i) Examples of how the unit has developed national and international impact in the field of health and wellbeing include:

- (a) **Vandrevala** conducts work on ethnicity and healthcare provision. In June 2020, she was invited to present her work on barriers to health testing and immunisation among ethnic minority communities to the Cabinet Office (organised by the Open Innovation Team); over 100 cabinet officials attended. Subsequently, in October 2020 **Vandrevala** was invited to join the Independent Scientific Pandemic Insights Group on Behaviours (SPI-B), a sub-group of SAGE, to advise on the COVID-19 pandemic response in relation to vulnerable and hard-to-reach groups. **Vandrevala**'s role in SAGE builds on her work on developing interventions to improve uptake rates for hepatitis B and C testing in migrant Asian communities living in the UK (funded by NIHR). **Vandrevala**'s team produced a culturally-tailored educational intervention to raise awareness of viral hepatitis and its testing, and address related barriers in a manner sensitive to the needs of this group. **Vandrevala** and her colleagues were subsequently successful in winning 1 of the 6 prestigious COVID-19/BAME project awards from UKRI/NIHR. **Vandrevala** has also developed an intervention to alert pregnant women to the risks of congenital cytomegalovirus (CMV) infection. In her NIHR funded study (2017-20), **Vandrevala** developed and tested a short educational film to be included as part of routine antenatal care in the NHS. She also successfully secured another grant from the NIHR Policy Research Programme (PRP) (2020-21) to consider how guidance on CMV can be incorporated into policy and routine care.
- (b) **Samara** is conducting research into bullying and cyberbullying (funded by QNRF), which has had a significant impact on anti-bullying policy and practice in Qatar and the Arab sector in Israel. All psychologists and social workers working in Qatari schools and paediatricians working in hospitals as well as in the Arab sector in Israel were trained by **Samara** on anti-bullying interventions and policies. The impacts are: (i) the implementation of research-informed anti-bullying policies and resources by schools in Qatar and the Arab sector of Israel; (ii) training practitioners at the Islamic and Family Courts in Qatar and the Arab sector in dealing with bullying, family violence, child abuse and neglect; (iii) changes in the way practitioners (e.g., psychologists and paediatricians) deal with cases of victimisation, abuse and neglect and



through new diagnostic tools for hospital-based clinicians. **Samara** (funded by QNRF) also conducts research with the Islamic University Gaza and the Ministry of Education in the Palestinian Territories, and Hamad Medical Corporation Hospital in Qatar to improve trauma and PTSD treatment among children and adolescents in the Palestinian Territories, Qatar and Syrian refugees. Three major interventions were developed as a result of these projects: (i) a school-based intervention in the Gaza Strip; (ii) training of psychologists in Qatar and the Gaza Strip on Trauma Focused Cognitive Behavioural Therapy, applied to all children with PTSD; (iii) research with refugee charities in the UK, leading to the development of interventions that improve the wellbeing of refugee children. **Samara's** work on toxic stress and PTSD in children was also showcased in a recent collection of reports funded by World Innovation Summit for Health (WISH) and published by the *British Medical Journal*. Finally, **Samara's** work in Qatar on the impact of premature birth on readiness for school (funded by QNRF) led to new training for all neonatologists and therapists (physio, occupational, speech) at the Neonatal Intensive Care Unit (NICU) and Child Development Centre (CDC) at HMC in Qatar. (See ICSUoA04Samara2).

- (c) **Nikcevic**, supported by the Fetal Medicine Foundation, examined the psychological impact of screening for preterm preeclampsia (PE) and participation in the Aspirin for Evidence-Based Preeclampsia Prevention (ASPREE) trial on women's experience of pregnancy. **Nikcevic's** research informed understanding of the emotional impact of a positive PE screening test result, as well as of the attitudes that women hold towards screening for preterm PE and towards prophylactic intervention (i.e., aspirin intake). The findings indicated no significant adverse psychological effects of PE screening; however, some women at high-risk of preterm PE were found to hold representations of their risk-status and treatment options that were not aligned with those of medical professionals. These findings will inform policy with regards to PE screening and prophylaxis becoming widely available in the NHS. The outcomes will also inform the development of counselling protocols for high-risk women during the decision-making phase (namely, whether to take medication to reduce the risk for preterm-PE or not).
- (d) **El Asam** is leading a project on high-risk online experiences among vulnerable young people. The research suggests that offline vulnerability extends to online life, implying that enhanced, targeted online safety education and support is required. The research informed the *Vulnerable Children Report*, commissioned by *Internet Matters*, a non-profit organisation to support and empower parents and carers to keep children safe in the digital world, launched at a meeting held at Westminster led by the Minister of State for the Department for Digital, Culture, Media and Sport.
- (e) In addition, impact from psychology research in areas of health and sports policy is generated by Petróczi (submitted in UoA3). Her research into the behavioural aspects of doping in sports in conjunction with the World Anti-Doping Agency (WADA) has led to the development of psychometric measures and novel methodologies that have been incorporated into WADA's education policies and practice. (See ICSUoA04Petroczi1).
- (ii) Our strategy over the last five years has also been to implement research-led changes in practice through developing long-term relationships with organisations in London, Surrey and the Southeast. In particular, **Tapp** works at Broadmoor Hospital and conducts work on transitioning between secure inpatient services (for patients, carers and staff); Broadmoor Hospital also hosts postgraduates from our Forensic Psychology MSc programme for research placements. Similarly, postgraduates from the MSc Clinical Applications of Psychology programme have worked with a regional social enterprise (the Recovery Initiative Social Enterprise, RISE) to implement research-led practice in the management of people in recovery from drug problems and other mental health problems. We also apply the same approach with two refugee charities with which we have conducted research (Paiwand and Klevis Kola) and other charities working with children with special needs (Pyramid, Place2Be, UK Young Autism Project and Yorda Adventures). In addition, we have established strong connections with Kingston Hospital and its Dementia Department, to accept students for placements and research work. In this way, psychology research at Kingston is becoming fully integrated with the local community on a long-term basis. We have also served the local community on a project-by-project basis. The University's Business Development Managers

## Unit-level environment template (REF5b)

liaise with external agencies to develop links and arrange contracts and fees where necessary. This has included liaising with The Royal Borough of Kingston (RBK) and other local service providers to secure tenders for research to inform practice. For example, research supported by RBK, KingstonFirst and three local nightclubs (**Terry**) examined how town centre drinking affects the local community and economy, resulting in recommendations via the Kingston Alcohol Strategy Steering Group that led to changes in policing practices in the town centre.

The University's Research Development and Business Engagement teams are part of an integrated service that works closely with Entrepreneurship Education, student placements, development and alumni relations to ensure that the public, civic and business engagement of our research and related activities are joined up. The University provides an academic Head of Impact and an Impact Team to oversee the impact agenda across the University and to advise on maximising and evaluating impact. The School has also provided financial support for impact, for example for **Samara** to visit the Arab sector of Israel and Qatar to establish the networks necessary to develop his projects reported here. Research impact is incorporated into PGR student training; it is a standing item on the School Research Committee agenda.

## 2. People

### a) Staff

Academic appointments are strongly informed by the applicant's research record of accomplishment (evidenced by publication quality and potential to generate external income and/or impact). All new colleagues appointed since 2014 have come from strong research departments: King's College London (**Martinelli, Theobald**), UCL (**Zloteanu**), University of Surrey (**Vandrevala**), University of Siena (**Galli**), University of Warwick (**Livanou**). The development of new taught programmes in forensic psychology (BPS-accredited) has led to new appointments specifically in that area. In addition to **Theobald**, **Tapp** (0.4 FTE) was recruited from Broadmoor Hospital and will reinforce research links with this key institution. At the close of the last REF census period we invested £30k in setting up an EEG laboratory to address particular research demands (**Vyas, Terry**). We appointed **Galli**, an established EEG researcher, to provide additional expertise to leverage this investment and promote EEG work in the unit; **Galli's** EEG lab has already graduated one PhD student, and produced a number of publications based on research conducted at Kingston (she has also secured external funding). Health research was strengthened with the appointment of **Vandrevala**. The appointment has resulted in new collaborative links with St George's, University of London and The Royal Surrey County Hospital; it has also led to our first income from the National Institute for Health Research (NIHR, four awards) and the Dunhill Medical Trust.

In order for our new appointees to develop productive programmes of research, we provide "start-up" funds to ensure that they can establish active laboratories quickly. The University has provided funding for an internal "First Grants Scheme": the scheme has supported 4 staff from UoA4 (out of 23 across the institution) to undertake preliminary research in support of a significant external funding application. This has included £10k for transcranial direct current stimulation (tDCS) equipment for **Galli** (2 x neuroConn DC-Stimulator-Plus) as well as consumables to support the EEG laboratory in which she works. This funding has led to grant income from NIHR (**Vandrevala**). For all staff, the UoA provides internal funding of up to £1k per FTE to cover a variety of research expenses, including research assistance and conference attendance.

The University also provides a structured research training programme for ECRs (open to all staff); there is an *ECR Network Scheme* which meets bi-monthly and a specific mentoring scheme to support ECRs. In UoA4, ECRs are mentored by a senior researcher from the unit, typically the appropriate Research Group lead. The DoR also meets with them every 3 months during probation. The requirements of ECRs have been specifically considered in the development of the

University's updated HR policy and support programmes, which also incorporate a BAME leadership programme.

Kingston's Domains framework (see Section 1c above) was designed to facilitate and support staff career development and advancement at all career stages, giving clear guidance on the expectations of current and future roles.

## b) Postgraduate Research Students

The DoR formally manages research student admissions, supported by a unit-specific research student coordinator (RSC) and the Faculty-level Research Student Administrator. The DoR and RSC contribute to Faculty and University strategy relating to PGR students via representation on the Faculty Research Degrees Committee, which reports to the University Research Degrees Committee. Annual monitoring and progression transfer is managed through Kingston's Online Student Information System (OSIS).

Our growing research student community has been integral to the Unit's research strategy over the last 10 years. The unit's first PhD student graduated in 2008; we now have 24 PhD students registered. University funds have supported (at least in part) 9 students. Recruitment has also been facilitated by the growth of external funding achieved over the last 10 years. Seven students have received support from external research awards: the QNRF and The Hamad Medical Corporation (**Samara**), the Fetal Medicine Foundation (**Nikcevic**), the European Foundation for Alcohol Research (**Terry**) and the Dunhill Medical Trust (**Vandrevale**). Three students (including 1 who has completed his PhD) received funding from overseas governments or agencies (Qatar Government, **Samara**). We have an agreement to host research students from the University of Rome (La Sapienza) for up to one year, and have welcomed 3 since 2014; one subsequently registered for PhD at Kingston. One of our PhD students (Sarah Geisemeyer) was a visiting researcher at the University of São Paulo (Brazil), where she carried out genetic screening and cognitive and emotional testing of children with Duchenne Muscular Dystrophy. **Samara** has also hosted students supported by the Erasmus programs: one from Italy, one from Germany and two from Turkey; he has also hosted a student from Israel supported by the Israeli Council for Higher Education, and one from Egypt.

Where appropriate, PhD students are offered the opportunity to teach undergraduate seminars for remuneration to help support their studies (prioritising self-funding students) and to provide HE teaching experience (UKPSF-accredited training is provided by the Learning and Teaching Enhancement Centre). Kingston University's Graduate Research School provides financial support for PhD students to attend at least one research conference during their period of registration; research grants and the unit's QR have also been allocated to support conference attendance. Research training is delivered at three levels: Level 1, compulsory generic research training for all students (e.g., information retrieval, intellectual property); Level 2, Faculty training, primarily supporting doctoral-level writing and presentational skills; Level 3, subject-specific research training. In our case, the latter is a formal, taught doctoral programme (60 credits) comprising: Research Skills in Psychology (30 credits); Research Design and Analysis (30 credits). Students must pass the 60 credits to transfer from initial MPhil registration to PhD registration. A professor or associate professor serves as Research Student Co-ordinator for the unit to oversee training; s/he arranges group meetings approximately every 4 weeks to provide opportunities for students to present and discuss their work informally with their peers. Students attend and present at the Research Group meetings and the series of departmental talks by external and internal researchers. There is an annual PGR cross-faculty student conference at which students in their second or third years of study are expected to present their research, and all students are expected to attend. Importantly, the event also incorporates a round-table discussion on career development with a panel composed of ECRs and more senior academics to discuss their journeys from final-year PhD students to securing employment in HE or the private sector. Finally, all PhD students are invited to join a reading group (the *Spring Grove Reading Club*), led by **Vallée-Tourangeau**, that meets every fortnight through most of the year as a journal club, discussing

## Unit-level environment template (REF5b)

papers primarily on research methodology, advanced inferential statistics, false positive psychology and open science practices.

The *Beyond Barriers Student Mentoring Scheme* is available to PGR students to support their development against equality objectives and our *One Kingston* strategy for equality, diversity and inclusion. Students are also supported through the *Accessibility Network*. The University offers staff a full fee waiver on research degrees, thereby contributing to their professional development.

### c) Equality and Diversity

At the institutional level, 45% of submitted staff are female and 19% assessed as BAME. In the UoA, 68% of the submitted staff are female and 21% are BAME. Approximately 5% of University staff have a declared disability, and 5% of the UoA. Our overall academic pay gap is currently 4.9%. Kingston currently holds an institutional Athena Swan bronze award and a Race Equality Charter bronze award. In 2020, The School of Law, Social and Behavioural Sciences submitted its application for an Athena Swan bronze award, a project led by **Theobald** and **Vallée-Tourangeau** from the Department of Psychology. During the census period, 4 colleagues in the UoA were promoted to Associate Professor (all female) and 1 to Professor (male).

Women are supported through the *Aurora* programme and BAME women through a BAME leadership programme. The University's work to embed diversity in academic progression and promotion received the *Guardian Diversity Award* (2014). A key objective of Kingston's EDI strategy has been to increase the proportion of BAME staff and women in professorial roles. The University's *Beyond Barriers Mentoring Scheme* is one of the strategies used to ensure that all of our staff have the best possible chance to succeed in their work and progress against equality objectives. Two colleagues from UoA4 have served as mentors on the *Beyond Barriers* programme. The School has also been an important contributor to the *Kingston Race Equality Scorecard*, the product of a research partnership with Kingston Race and Equalities Council and the Runnymede Trust to reduce inequalities for BAME communities.

## 3. Income, infrastructure and facilities

### a) Income

A continued emphasis on generating external income has been a focus of the unit over the census period, and we have achieved considerable success in a short time, increasing external research income by a factor of 6 during the current REF census period in comparison with the previous cycle. The spread of applications across staff and the range of funding sources have also increased (as documented in Section 1c). During the current census period we have been successful in attracting awards from:

- NIHR (£220k, **Vandrevala**),
- the Qatar National Research Fund (£555k, **Samara**),
- the Dunhill Medical Trust (£35k, **Vandrevala**),
- the Hamad Medical Corporation (£70k, **Samara**),
- the Nuffield Foundation (£140k, van Herwegen - former staff),
- also Baily Thomas charity, the Churchill Trust, the British Academy, the Williams Syndrome Foundation, Rethink Mental Health, Sight for Surrey, a Surrey hospital-based charity and a community interest company.

In addition, we have received income from ongoing projects funded by:

- ESRC (£187k),
- the Fetal Medicine Foundation (£62k, **Nikcevic**),
- Dept of Health and Social Care Health & Social Care Volunteer Fund (£31k, **Nikcevic**),
- also the European Foundation for Alcohol Research, British Psychological Society, Royal Borough of Kingston and Lowery Ltd.



**b) Infrastructure and Facilities**

The table below details investment in (and development of) facilities, including support to access specialised equipment at external laboratories to conduct research:

<b>Infrastructure</b>	<b>Staff</b>	<b>Investment</b>
Renovated 6 generic research laboratories in 2017 (built in 2009) with new networked PCs and furniture	All/general	
Renovated laboratories to support eyetracking experiments: <ul style="list-style-type: none"> <li>One with an Eyelink 1000 eyetracker;</li> <li>One with a Tobii T-120 eyetracker and a Tobii X2-60 eyetracker;</li> <li>Also available: Tobii Smart Glasses IR and software for off-site eyetracking studies (supports a collaboration with Malafouris at the University of Oxford).</li> </ul>	All/general All/general <b>Back, Vallée-Tourangeau</b>	£9k, 2014 University investment
Maintenance of laboratory fully-equipped for psychopharmacology/psychophysiology experiments	<b>Terry</b>	
Laboratory dedicated to neuropsychological testing, including: <ul style="list-style-type: none"> <li>Two CANTABclipse touchscreen test batteries (includes purchase of second 10-year licence);</li> <li>Access to Inquisit software;</li> <li>Access to MATRICS test battery.</li> </ul>	All/general <b>Vyas, general</b> <b>Felisberti</b> <b>Vyas</b>	£10k, 2014 University >£2k, 2015
Web access to the CANTAB test battery and dataset.	<b>Vyas, general</b>	£14k, 2020 University
Driving simulator (XPDS-R3, XPI Research), used in a large-scale collaboration between KU researchers from Royal Holloway University of London, King's College London and the University of Greenwich.	<b>Terry, Felisberti</b>	£25k
2019: Upgrade of observation lab, initially fitted in 2014: new equipment and software with state-of-the-art remote-access cameras and microphones and Observer (Noldus) software to support work.	All/general	>£36k, 2019, University – competitive award
Set up an EEG laboratory in new, dedicated space: <ul style="list-style-type: none"> <li>Bio-Semi 32 channel EEG;</li> <li>2 x tDCS neuroConn DC-Stimulator+ probes).</li> </ul>	<b>Galli, Vyas</b>	£45k
Upgrade of Biopac equipment	<b>Vyas, Terry</b>	Additional £5k
3 licenses of Comprehensive Meta-Analysis software	<b>Samara</b>	
Neurodevelopmental Bayley test pack for child assessment	<b>Samara</b>	Grant funding
Visit to neuroimaging facilities in the US (University of California, San Diego; NIH-Child Psychiatry Branch, Maryland) for data collection and analysis	<b>Vyas</b>	(Subsequent Churchill Fellowship award)
Visit to Japan (Kyoto University: Dr Miyata and Prof Murai) to undergo training in DTI imaging in psychosis	<b>Vyas</b>	

Because of the considerable investment in new and upgraded equipment from 2014, the unit identified a need for additional research/technical support to ensure that staff and PGR students were able to acquire the necessary skills and expertise to benefit from the investment. To these

ends, the UoA was supported by the University's Research Transformation Fund to recruit a postdoctoral research associate with the necessary expertise to provide this support, which is ongoing (see Section 1c, 6).

We use the Sona Systems web application to manage research participation (which is a course requirement for UG and PG students). University investment has also provided funds to support and maintain a pool of 15 laptops configured with E-prime and Superlab for field work; we also have a network licence for E-prime and Superlab to support 24 simultaneous users, and since 2014 we have acquired an institutional network licence for Matlab. We have networked access to Qualtrics for survey work.

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

##### a) Collaborations, Networks and Partnerships

*Theoretical and Applied Contributions to the Discipline, by Research Group*

*Developmental Psychology.* Researchers in this group, led by **Samara**, have developed research programmes of direct relevance to the understanding and treatment of developmental disorders, bullying, online risk, PTSD, and prematurity; his recent work has provided the most detailed longitudinal account of the effects of extreme prematurity on cognition and behavioural problems of infancy. **Theobald** is part of a team that has conducted a major longitudinal study that has implicated cannabis use during adolescence as a causative factor for mid-life major depressive disorder and violent offending. **El Asam** has been funded to investigate the experience of online risks amongst vulnerable young people and also the legal consequences of cyberbullying. Finally, **Back** has recently published a paper in *Child Development* using eye tracking data with neurotypical and ASD adolescents on their ability to infer mental states from naturalistic, dynamic faces rather than the static faces that are commonly-used in related research.

*Clinical and Applied Behavioural Research.* **Nikcevic** is the group lead: her work examines the role of metacognition across psychological conditions, proposing novel models for understanding procrastination, nicotine dependence and self-critical rumination. **Pavey** explores the importance of health message framing for improved dietary behaviours and promoting safe alcohol consumption. **Vyas's** research with individuals with schizophrenia has shown that reduced dopamine receptor availability indicates high levels of dopamine in the synapse, and this impacts on executive functioning in schizophrenia. In recognition of her expertise on health in vulnerable and hard-to-reach groups, **Vandrevala** was asked to join the Independent Scientific Pandemic Insights Group on Behaviours (SPI-B). **Vandrevala** also won a UKRI/NOHR grant (2020-21) which aims to design culturally relevant health messages for Black and South Asian groups and deliver these messages through specific and trusted communications channels, to influence behaviours that reduce the transmission of COVID-19, such as perceived risks and susceptibility, proximity and social distancing, and infection control. **Terry's** recently-published work on behaviours related to coronavirus transmission risk was conducted before the current pandemic; the work continues as an interdisciplinary collaboration between Kingston University, Wuhan University and the EcoHealth alliance (New York, US). **Petróczy's** recent work focuses on understanding why clean athletes do not dope, in order to develop prevention or intervention strategies based on these insights, in contrast to previous efforts that have focused on the experiences of 'doping' athletes. **Tapp** has published extensively on factors affecting the readiness of forensic patients to engage with treatment at secure hospitals.

*Art, Cognition/Creativity and Emotion.* A multidisciplinary group bringing together a wide range of research topics, led by **Felisberti** who works on the dynamic association between perception and emotions (subsidiaries: mental imagery, aesthetics, empathy), from looking at the importance of testing mental imagery ability in students enrolling for arts and engineering degrees to how the childhood family environment affects emotional processing ability in adulthood. **Zloteanu's** research focuses on the role of facial expressions, empathy, and emotion recognition, relevant to

training on deception detection. Recent work by **Galli** has demonstrated how behaviour might be predicted from physiological markers irrespective of stated intentions. **Galli** also has an ongoing international project on the key neural processes that underlie memory formation. **Livanou** examines youth mental health, emerging personality disorders and eating disorders, with a focus on care policies and practice. An established programme of research anchored in 4E cognition led by **Vallée-Tourangeau** has shown the importance of action to enhance creative problem solving, challenging the notion of the individual as the ontological locus of cognition. The research casts creativity as an emergent property of interacting with physical models of the problem, which in turn invites a reconceptualization of agency and intentionality in creativity.

*Social Psychology.* **O'Dwyer** is the group lead. Her work has generated innovative insights into important issues in social and political psychology, including attitudes towards and understandings of foreign policy issues such as drone warfare and neutrality. **O'Dwyer** also studies citizenship and political participation, with a current ongoing longitudinal project examining the social and political implications of COVID-19 mutual aid groups. Researchers in the group also conduct work on prejudice and discrimination, with a particular interest in the phenomena of hostile and benevolent sexism.

The **Creative Cognition Laboratory (CCL)** was set up in November 2018 to build on the developing research interest in creativity in wide cognition (that is, creativity as something that arises from the interaction between people and things, as distinct from a brainbound phenomenon). The CCL is a member of several international networks: an associate of *Webster Centre for Creativity and Innovation* in Geneva; invited member of the *International Society for the Study of Creativity and Innovation*; and an invited member of the *Possibility Studies Network*. The CCL is a named collaborator on the handMADE ERC-funded project with Oxford University. The CCL has organised three symposia and has supported the organisation of one full conference since its formation: *The Serendipity Society Conference*, (September, 2019) which was the first international conference of serendipity researchers; *Creativity Chats* (October, 2019) which invited leading creativity researchers to Kingston University in an extended discussion on the state of the field; and *Serendipity for Cognitive Science* (September 2020, online) which invited leading researchers in cognitive science to discuss and reflect on serendipity and creativity.

#### *Hosting and Organizing Conferences, Symposia and Workshops*

The **Developing Minds Laboratory** in association with the CCL produced two public facing workshops, *Developing Creativity in the Classroom* (January 2020; working with teachers), and: *The role of Serendipity in Innovation and Creativity* (September 2020, with Norfolk Chamber of Commerce). In 2019, the Laboratory hosted a public workshop at Kingston University on *Developing Mathematical Abilities and Creativity*.

**Samara** hosted an international conference at Kingston in November 2015: *Rethinking Trauma and Resilience*, attended by 150 academics, researchers and professionals. He was also symposium chair (*Children and Youth Exposed to War Trauma and Violence*) at the meeting of the Society for Research in Child Development in March 2015 (Philadelphia, PA). In 2016, **Samara** organised a workshop on bullying for schoolteachers, psychologists, social workers, researchers and physicians in Qatar (attendance, 200). In 2016 **Samara** organised two training workshops on the implementation of the Neurodevelopmental Bayley test for developmental psychologists at the Department of Psychology and physicians and therapists at Hamad Medical Corporation (HMC) Hospital in Qatar. In 2018 he organised two workshops on TF-CBT for psychologists in Qatar and the Gaza Strip. **Vallée-Tourangeau** organised and hosted: *The Systemic Cognition Symposium* at Kingston in July 2017; the *3rd International Conference on Language, Interactivity and Cognition* at Kingston in June 2016; and the *6th Distributed Thinking Symposium* at Kingston in March 2014. He also served as Member of the program committee for the 37<sup>th</sup> Annual Meeting of the Cognitive Science Society in Pasadena, CA; he has co-organized a symposium on insight problem solving (symposium proposals were refereed) at the 41<sup>st</sup> Annual Conference of the Cognitive Science Society in July 2019. **Back** is a member of the organising committee for the annual conference of

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the BPS Developmental Psychology Section and organised and led a workshop *ASD across the lifespan* for practitioners, researchers and parents at Kingston in June 2017. **Back** co-organized the *Neurodevelopmental Disorders Annual Seminar* in 2017 and a workshop on eye tracking for developmental disorders targeted at early career researchers. **Felisberti** was a member of the Advisory Committee for the *Visual Science of Art Conference* (Science Museum, Barcelona, Spain, 2016). The Social Psychology group organised a summer school on *Doing and Communicating Qualitative Research* at Kingston (2015, 2016 and 2017), focused on imparting principles and developing skills in qualitative research among both novice and experienced qualitative researchers. Each Summer School involved leading qualitative researchers as keynote speakers and workshop facilitators, and attracted well over 100 participants, with some travelling from mainland Europe and the USA.

### External Collaborations

An extensive network of external collaborators scaffolds the unit's productivity. These collaborations have led to journal articles and/or grant applications. For example, **Back** collaborates with Prof Gaia Scerif (University of Oxford; two grant applications submitted) and Dr Sander Begeer (Vrije Universiteit Amsterdam). **Felisberti** has published papers with Prof Kaisa Tiippana (University of Helsinki), Prof Jiri Lukavský (Czech Academy of Sciences), Prof Maria Pérez-Fabello (University of Vigo), Prof Kristina Musholt (Leipzig University), Dr Robert King (University College Cork) and Prof Rebecca Sear (LSHTM). **Galli** has submitted grant applications with Prof Fergus Craik (University of Toronto) and published papers with Prof Martin Paulus (University of California, San Diego), Prof Matteo Feurra (National Research University Moscow), Dr Emiliano Santarnecchi (Harvard Medical School), and Dr Leun Otten (UCL). **O'Dwyer** has papers with Prof Chris Cohrs (Philipps-Universität Marburg, Germany), and Dr Ahmet Coymak (Abdullah Gül University, Turkey); **Pavey** maintains a long-term research programme with Dr Paul Sparks (University of Sussex) which has led to several publications. Petróczi works closely with the World Anti-Doping Agency and has collaborated with Prof Norman (University of Sheffield) on anti-doping education; she leads the *Clean Sport Alliance* in collaboration with Prof Susan Backhouse (Leeds Beckett University). **Samara** has grant-funded work and publications from collaborations with Prof Neil Marlow (UCL), Prof Peter Smith (Goldsmiths, University of London), Dr Azhar Khattab, Dr Nader Al-Dewik, Dr Hisham Morsi (HMC Hospital, Qatar), Prof Raija Punamaki (Tempere University, Finland), Prof Samir Qouta (Islamic University, Gaza), Prof Tariq Madood (University of Bristol), Prof Nabil Khattab (Doha Institute, Qatar), Prof Dieter Wolke (University of Warwick) and Dr Mairead Foody (Maynooth University, Ireland). **Tapp** has published many papers from his research with colleagues at Broadmoor Hospital and has also submitted NIHR bids with Prof Birgit Vollm (then of Rampton Hospital, University of Nottingham) and Prof Ruth McDonald (University of Manchester). **Terry** publishes with Prof Suzanne Higgs (University of Birmingham), Dr Leigh Gibson (University of Roehampton) and on coronavirus with Wuhan University (China) and the EcoHealth Alliance (USA). **Theobald** collaborates with Prof David Farrington (University of Cambridge), Prof Alex Piquero (University of Texas at Dallas), Drs Jean-Baptiste Pingault and Tabea Shoeler (UCL) and Dr Sagnik Battacharyya (Institute of Psychology, Psychiatry and Neuroscience, KCL). **Vallée-Tourangeau** has published and submitted funding applications with Prof Sune Steffensen (University of Southern Denmark); he is involved in a project on material engagement and creativity with Dr Lambros Malafouris (Hertford College, Oxford, as part of the European Research Council Consolidator Grant, HANDMADE, awarded to Malafouris). Since 2014, **Vyas** collaborates with Dr Nitin Gogtay and Prof. Monte Buchsbaum (NIH-Child Psychiatry Branch, Maryland; and University of California, San Diego, respectively), leading to the publication of a PET imaging manuscript on adults with schizophrenia. **Vandrevale's** collaboration with Prof Aftab Ala (the Royal Surrey NHS Foundation Trust, and Kings College hospital) resulted in securing funding from UKRI and NIHR. **Zloteanu** is a behavioural consultant to Brainpool AI (London, UK).



**b) Contributions to the Research Base, Economy and Society***Journal Editorial Roles, Grant Reviewing and Media Engagement*

**Terry** is an associate editor of *Addiction* and an associate editor of *Substance Use and Misuse*. **Vallée-Tourangeau** served on the editorial board of *The Canadian Journal of Experimental Psychology* (2013-2018) and is currently a senior editor for *Europe's Journal of Psychology*; he is also co-editing (with Prof Linden Ball, University of Central Lancashire) the *Routledge Handbook of Creative Cognition*, due in 2021. **Samara** is associate editor for the *International Journal of Bullying Prevention* and the *Journal of Child and Adolescent Trauma* and on the editorial board of the *Journal of School Violence*. **Samara** led several special issues in different journals, including the *International Journal of Developmental Science* on cultural issues in bullying and cyberbullying and the *International Journal of Emotional Education* on the effects of school design, safety and climate on bullying. **Petróczi** serves on the editorial board of *Substance Abuse Treatment, Prevention, and Policy*. Researchers are regular reviewers for a wide range of journals and funding bodies, including the ESRC (**Felisberti, Back, Vyas, Terry, Samara**), MRC (**Vyas, Samara**) and BBSRC (**Felisberti**), the MS Society (**Butler**), the Deutsche Forschungsgemeinschaft (German Research Foundation, **Vallée-Tourangeau**), the Belgian FNRS/ Research Foundation Flanders (**Terry, Vallée-Tourangeau**), and the Natural Sciences and Engineering Research Council of Canada and the Newton Fund (**Felisberti**). **Vyas** serves as a reviewer for the Fulbright Scholar Awards programme. **Samara** is on the Management Steering Committee of the European Cooperation for Science and Technology (COST) programme for the project: *Transnational Collaboration on Bullying, Migration and Integration at School Level* (CA18115) and leader of WG5: School Design & Safety (2019-2023) and a member of All-Party Parliamentary Group on Bullying (APPG) at the Westminster Parliament (2018- to date).

**Samara's** work has led to extensive media interest (BMJ Feature, BBC TV, BBC Online, Al-Jazeera, Sky News, Huffington Post, Daily Mail, Daily Express, The Guardian, Telegraph online). Research by **Butler, Petróczi, Terry, Vallée-Tourangeau** has also featured in the media since 2014 (e.g., The Economist, Newsweek, BBC News, Mail Online, Nature News, THE Higher Education, Medical Express, The Independent, Men's Health, Women's Health, Marie Claire, The Conversation, Live Science). **Vandrevala's** recent work on BAME and COVID-19 has also been extensively covered in the media (e.g., The Guardian, BBC News).