

Institution: Goldsmiths, University of London

**Unit of Assessment:** 4 – Psychology, Psychiatry, & Neuroscience

1. Unit context and structure, research and impact strategy

## 1.1 Unit Context

The Psychology Department, being one of two STEM-related departments, has a vibrant research culture born out of our unique position within Goldsmiths, one of the world's top 100 creative universities, primarily known for arts, humanities, and cultural studies. This helps liberate our research from disciplinary silos while intensely promoting a creative and collaborative environment within and outside academia. Our track-record in conventional fields like cognitive neuroscience, developmental neuropsychology and individual differences is striking considering our unconventional foundations. Our creative and collaborative research ventures (and adventures!) with artists, performers, practitioners, and our translational work are distinctive because they leverage connections beyond traditional STEM-orientated approaches and institutions and expand the horizon of psychological investigation.

Among our many **creative and innovative projects**, our researchers investigate how to use magic tricks to enhance well-being; explore the neuroscientific basis of live experiences through the dynamics of dance; enhance creativity by advanced brain mapping; interrogate the meaning of heterosexuality; and identify music which makes babies happy.

We tackle **real-world issues**, advising the United Nations on an ethical protocol to support the legal prohibition of torture, sharing new knowledge about gay rights issues with advocacy groups in Jamaica, implementing community-based singing for perinatal mental health in Gambia, and advancement of female STEM participation in secondary schools in Rwanda.

We translate our research to make significant **societal impacts**, leading police forces and national security agencies to change their operational practice during an investigative interview, influencing national health policy and practices by raising awareness of autism diagnosis waiting times, and guiding creative industries to optimise audience engagement in their innovative outputs.

We are a mid-sized, vibrant department with a collegial environment, with staff at all stages of an academic career; in 2020, this included **37 research-active Academic Staff** (34 FTE). We also have **6 Postdoctoral Researchers**, 4 Teaching Fellows, 9 Associate Lecturers, and 5 Professional support staff. The Department currently has 687 undergraduate students, 173 master's students, and **45 PhD students**.

During this REF cycle, the Department has implemented a series of strategic initiatives to strengthen and diversify **our research capacity**. As well as **investing in research staff (see Sec. 1.2)**, we have **boosted our collaborations within and outside of academia**, securing more than 30 research grants with a total amount over £4.5M. Staff published over 500 research articles, presented at over 400 conferences in over 40 countries and contributed to editorial panels in over 20 journals. Our research findings regularly capture attention from mainstream media outlets (e.g., BBC, ITV, CNN, *The New York Times*, *The Wall Street Journal*, *New Scientist*).



## 1.2 Strategic Aims

Since the last REF, the Department has strategically focussed (and acted accordingly) on (i) enhancing research capacity (appointing 12 new members of staff on permanent teaching and research contracts), (ii) rewarding research excellence (moving 61.7% of staff into senior researcher positions), (iii) nurturing and supporting early career researchers (with a staff retention rate over 90%), (iv) diversifying grant applications and intensifying research collaboration with outside academia (holding grants with charities, Fortune 500 companies, tech start-ups, creative and performance industries), (v) generating research impact (actively pursuing and exploring novel ways to create impact), and (vi) promoting open science (holding external grants and organising research events). The Department's strategic commitment to nurturing and supporting academic colleagues at all stages of their career is central to our recruitment and promotion process. We have attracted high-quality researchers; our high staff retention shows the research environment's vitality, and the exemplary record of internal promotions shows sustainability. Our research strategy has fostered a creative, supportive, and collaborative research environment, committed to equality and diversity, research integrity, research openness and making a tangible difference in society.

## 1.3 Research Groups

Compared to the previous REF period during which the Department's research was organically developed, in this REF period we have adopted a focused approach by forming **five Research Groups**, with the first three (C2N, DES, and SPP) focusing on the traditional research fields within psychology and neuroscience, and the last two (FCS and SCAPA) **focusing on interdisciplinary research fields** like forensic psychology and creativity and science of performing arts. This **strategic balance between classical conventional fields and emerging interdisciplinary fields** renders the Department a special place whose research outputs strengthen and advance the broad field of psychology and neuroscience, push research frontiers and herald several unique lines of research enquiry.

Each academic staff member has a primary affiliation with one of these groups, and many affiliates with another, reflecting our commitment to **effective inter-group research collaboration**. Several Research Groups are also associated with one or more specific MSc programmes, ensuring research-led teaching (\* denotes new appointment during this REF period):

Cognition and Neuroscience (C2N)

Bhattacharya (Head), Banissy, Cappelletti, Charlton, Cocchini, Davidoff, De Fockert, Herrojo Ruiz\*, Kuhn, Linnell, Moore, Terhune, Yon\*, Van Velzen.

This research group is the largest and investigates human cognition (from sensory processing to complex human behaviour), its underlying neurobiological mechanisms, and its variability among individuals across the lifespan and between cultures. This Group supports the development of applications from these mechanisms to solve real-world problems and support intervention approaches to facilitate cognition, psychological health, and well-being.

<u>Highlights</u>: The C2N Group has received funding from major UK and EU research grant providers. Research projects include enhancing self-other control impacts empathetic responses (ESRC, Banissy); human agency (Leverhulme Trust, Moore); the cognitive and neural basis of time



estimation (BBSRC, Terhune); brain mapping of creativity (EU – FP7, Bhattacharya and Banissy); tracing early changes of cognitive and psychological issues characterising late-life (BIAL Foundation, Cappelletti and Herrojo Ruiz); promoting STEM education among female students in Rwanda (GCRF, Linnell). The C2N members have published prestigious impactful research articles on a range of topics including creativity enhancement by brain stimulation (PNAS, 2018 – Banissy and Bhattacharya), unconscious priming by magic (PNAS, 2020 – Kuhn), temporal dilation by blinking (Current Biology, 2016 – Terhune), anxiety and motor learning (eLife, 2020 – Herrojo Ruiz), modulation of visual perception by urbanisation (Child Development, 2016 – Davidoff, De Fockert, and Linnell), perception-action coupling (*Nature Communications*, 2018 – Yon), multisensory processing in infants (Current Biology, 2014 - Van Velzen), inhibitory abilities in ageing (Journal of Neuroscience, 2018 - Cappelletti), and predicting dementia (Stroke, 2019 -Charlton). Further, Kuhn has written a book on the psychology of magic (Experiencing the Impossible, MIT Press, 2019) which was shortlisted by the BPS for the 2020 Book Award. The C2N runs three MSc programs – on clinical and cognitive neuroscience, research methods in psychology, and computational cognitive neuroscience, the last one jointly with the Computing Department.

Developmental and Educational Science (DES)

**Mercure\*** (Head), **Addyman\***, **Custance**, **Gregory**, **Jones Bartoli**, **Kovas**, **Smith** (Bremner, Oliver, Rutland - former members)

The DES Group investigates the development of psychological processes from infancy to adolescence to inform our scientific understanding of human development, and to support the application of concepts from developmental science to the real-world (e.g., in schools, for family intervention). Group members focus on how concepts from developmental psychology can be applied to further the healthy development of individuals from typical and atypical populations.

Highlights: Jones Bartoli was awarded a grant from the OVO Foundation to connect her work with families and schools, promoting play-based storytelling to develop literacy, language, and socio-emotional skills in early years. Addyman was awarded multiple grants (British Academy, EU) promoting open science and research methods. Gregory has received several grants funded by Western Australia Skeptics, MRC, and Wellcome Trust (with Banissy from C2N), investigating sleep and mental health. The DES members have published influential research articles on topics including individual differences in learning and cognitive abilities (*JPSP*, 2016 – Kovas), predicting educational achievement from DNA (Molecular Psychiatry, 2017 – Kovas), multi-sensory development in infants (*Current Biology*, 2015 – Bremner), intergroup attitudes in children (*Psychological Sciences*, 2015 - Rutland) sleep and mental health in adolescents (*Sleep*, 2018 – Gregory). Smith has co-authored more than five books, including several monographs on bullying, and a four-volume edition on the psychology of education (Routledge, 2020). Finally, Gregory wrote two books on sleep, one for a general audience (*Nodding Off*, Bloomsbury, 2018) and the other for children promoting mindfulness in sleep hygiene (*The Sleepy Pebble*, Flying Eye, 2019).

Social Processes and Personality (SPP)

Cooper (Head), Golec de Zavala, French, Kumashiro, Pickering, West (von Stumm – former member)

The SPP Group performs basic and applied research into understanding personality, and how this affects our interactions with others, on both an individual and a group-based level. Within this



framework, the Group's interests are diverse but include such topics as belief in conspiracies, who would make your ideal romantic partner, or what is meant by words like "straight" or "gay". Group members work with activists and charities all over the world, applying knowledge from social psychology to improve society.

<u>Highlights</u>: West has been awarded an ERC Starting Grant to identify the predictors and associated consequences of lay beliefs about heterosexuality and investigate these beliefs' consequences for sexual prejudice. Golec de Zavala has secured a large grant from the National Science Center, Poland to use mindful gratitude meditation as an intervention to address collective narcissists' hostility. The SPP members have published several significant research findings on a range of topics including creativity in romantic passion (*JPSP*, 2019 – Kumashiro), collective narcissism (*JPSP*, 2019 - Golec de Zavala), sleep paralysis (*Sleep Med Rev*, 2018 - French), reinforcement theory of personality (Psych Assessment, 2016), and reward processing (*Biological Psychology*, 2019 – Pickering). Members of the SPP Group also run a MSc programme on clinical and health psychology.

Forensic and Clinical Science (FCS)

Gabbert (Head), Goddard, Jansari\*, McAnena, Scott\*, Wright

The FCS Group is a hub for research on specialist teaching and consultancy in forensic and clinical psychology. The Group focuses on advancing psychological knowledge in legal and well-being contexts and addresses current societal issues by developing and testing evidence-based solutions in contexts such as investigative interviewing. Group members work closely with local and international external agencies such as police forces, prisons, and NHS trusts.

<u>Highlights</u>: Gabbert and Wright have been supported by a grant funded by CREST/ESRC, focusing on rapport building in an information-gathering context such as an interview with a suspected witness of a crime. The FCS Group has published several impactful papers on a range of topics including eyewitness testimony (*Law and Human Behaviour*, 2018), image-based sexual abuse (*Computers Human Behaviour*, 2019 – Scott), deception (*Current Biology*, 2015 – Wright) and autism diagnosis (*Autism*, 2016 – Goddard). FCS members have developed innovative ways to improve the usability, credibility, and reliability of evidence from eyewitnesses, that have had an important impact on police operational procedure and policy in the UK and internationally (see one of our ICS based on a body of research published by Gabbert). The group runs a successful MSc program on forensic psychology.

Science of Creative and Performing Arts (SCAPA)

Stewart (Head), Chamberlain\*, Freeman, Heaton, Müllensiefen, Omigie\*, Orgs\*

The SCAPA Group, unique in its constellation of research interests, investigates the cognitive and neural bases of music, dance, visual arts, and user experience to improve our understanding of those domains, as well as to provide a window onto perceptual and motor learning processing, creativity, aesthetic appreciation, and therapeutic applications. This Group is distinct worldwide with its research scopes and expertise, and further pushes research frontiers in creative and performing arts.



Highlights: The SCAPA members have received numerous major research grants. Orgs has recently been awarded an ERC Consolidator Grant (2020-25, €1.9M) to study the neuroscientific basis of what makes a live experience special. Stewart won an MRC/AHRC grant to investigate community-based group singing as support for women's mental health in the perinatal period in the Gambia. Freeman, the founder of i2 media research and an international expert on immersive user experience, is engaged in a multimillion-pound UKRI research grant with the Royal Shakespeare Company and other institutions to develop immersive technologies like virtual reality for bringing new performing arts experiences to audiences. The Group members have published landmark findings on a range of topics including individual differences in musical sophistication (*PLoS ONE*, 2014 – Müllensiefen and Stewart), dance aesthetics (*Cognition*, 2020 – Orgs), processing of musical valence in the amygdala (*Cerebral Cortex*, 2015 – Omigie), brain connectivity in amusia (*eLife*, 2020 - Stewart). The SCAPA Group runs two unique MSc programmes (both first of their kind in the world), one on music, mind and brain, and the other on the psychology of the arts, neuroaesthetics and creativity.

## 1.4 Future Research Strategy

Our Strategy for supporting the sustainability and vitality of our future research is to consolidate and extend an open research culture by engaging with best practices of sharing research, engaging with open science and providing self-reflection on our research practices. Nurturing and promoting academics, especially at the early career level, is pivotal to our strategy, and we will continue to ensure supportive and creative research structures to help both staff and students succeed. Lab-based research is our strength, but we do recognise the increasing importance of extending this research to real-world and online environments. In particular, we are conscious of the potential of emerging mobile and virtual technologies, and we are engaging with and investing in the use of these state-of-the-art technologies to play a leading role in the field of mobile cognition (e.g., Orgs' recently awarded 5-year ERC Consolidator Grant will be a catalyst in this direction). Further, we also intend to strengthen our existing interdisciplinary collaborations with arts and humanities at Goldsmiths and aim to forge a tighter and more effective synergy between empirical research and real-world environments to extend our research impact.

## 1.5 Impact Strategy and Achievement of Impact

We have a dedicated Impact Team led by **Gabbert** with two strategic aims: (i) to generate awareness of opportunities for impact by integrating impact into general research activity, and (ii) to build and strengthen relationships with stakeholders and beneficiaries.

To achieve the first aim, we (i) include impact as a standing item at our Research Focus Days, relevant Committee Meetings, in annual Performance & Development Reviews, (ii) have created a grant review panel which provides critical feedback on any grant application both at the bid development stage and at the ethics stage; feedback is focused on identifying possible beneficiaries and potential impact, as well as support needed to enable impact, (iii), keep a record of impact activities throughout research projects, who was engaged, when and why, the outcome and follow up of the project, and (iv) organise events through our Lunchtime Seminar Series for staff to share/receive advice on generating impact.

To achieve the second aim, we (i) include public engagement as a standing item as above, (ii) create and maintain a database of existing shareholders, beneficiaries etc. who could be



approached by other researchers, organised by sector (education, health, criminal justice), (iii) extend this database by actively promoting our research to potential non-academic partners (e.g., using social media and dedicated web pages for dissemination, using other dissemination opportunities like the use of press releases to showcase our research to the general public, media outlets and policymakers), (iv) strengthen existing relationships by engaging stakeholders as research partners and beneficiaries via joint bids or co-supervision of research projects, and (v) monitor debates and initiatives in policy and practice through our membership of advisory groups.

This multi-pronged approach has directly encouraged and enabled various pathways to impact for many researchers within the Department. It is now increasingly common for staff members to directly engage with stakeholders and end-users of their research. This has led to impacts in a wide range of educational, clinical, forensic, and business settings with demonstrable reach and significance (see Sec. 4.1 for further details). Our three Impact Case Studies (ICS) are testament to the success of our strategic approach to achieving non-academic impact. For example, Freeman's ICS benefited directly from the Department's 2nd strategic aim. In summer 2018, the Department committed to making a funding contribution to the inaugural Royal Shakespeare Company (RSC) - Magic Leap Digital Fellowships scheme. This financial contribution strengthened Freeman's, the Department's and Goldsmiths' relationships with RSC, reflecting our collective commitment to our collaboration. This demonstration of our commitment contributed to our engagement in the large-scale UKRI-funded Audience of the Future Performance Demonstrator (2019-2021), which forms a key part of Freeman's ICS. Goddard's ICS was directly facilitated by a one-day event organized by the department in which research findings were presented to potential stakeholders who took part in the research (adult autistic participants, parents of autistic children and clinicians), lead autism organisations; further, the department has hosted a dedicated website (Diagnosis of Autism Project) for dissemination of the research findings. A deliberate strategy of targeted knowledge exchange across national and international law enforcement and intelligence agencies, coupled with working in a collaborative capacity with end-users where possible, has benefited Gabbert's ICS by positively influencing professional practice, training, and policy in the UK and internationally relating to securing reliable evidence in forensic investigation.

#### 1.6 Supporting Interdisciplinary Research

As detailed in Sec. 1.3 on Research Groups, we take pride in our interdisciplinary research approaches and collaborations. For example, our entire SCAPA Group is dedicated to conducting interdisciplinary research by combining psychology, neuroscience, music, dance, art, media, theatre, user experience and virtual reality. We actively promote intergroup research collaborations, and indeed many research outputs are co-authored by staff members coming from multiple Research Groups. To further strengthen the collaboration, Group Heads meet with Head of Departments on a termly basis to explore possible cross-group projects.

## 1.7 Supporting Open Research Environment

We are committed to an open science culture by engaging with the best practices of sharing our research, engaging with open science, and providing critical self-reflection on our research practices. We believe that Open Science is about making all aspects of the research process transparent to all parties and involves innovative approaches to communicating results and sharing materials and outputs. We have a dedicated Open Science lead (**Addyman**). Our strategy towards building a strong open research environment is based on multipronged approaches, including



securing external funding related to open science (*BE-OPEN* project funded by the EU), organising events (*Open Research for Academics: A Workshop and Hackathon* funded by the British Academy), open access of research outputs (Green Open Access via Goldsmiths research depository or Gold Open Access via research grant or other funds), free access of psychometric tools developed by our staff (Gold-MSI developed by **Müllensiefen** and **Stewart**), and increasing awareness (teaching reproducibility to all students including PGRs). Of note, **Addyman** won a British Academy Rising Star Engagement Award to promote Open Research in Academia, and **Von Stumm** (a staff member at the time of the award) won another British Academy Rising Star Engagement Award to organise a showcase event which brought together scientists, technology companies, media, and crowd-sourcing experts with the aim to collect 'big data' with innovative assessment tools.

# 1.8 Supporting a Culture of Research Integrity

All research conducted in the Department must be approved by the Departmental Ethics Committee (DEC). We maintain an internally secured site containing detailed information and relevant documents (e.g., BPS research guidelines and policy documents, Code of human research ethics, Ethical guidelines for conducting research with children and/or vulnerable populations, health, and safety information, GDPR requirements, samples of research projects detailing how ethical concerns were met). All proposals are submitted to the DEC. Proposals with no obvious ethical issues are reviewed by a committee member; two members review proposals where issues may arise, and these are passed on to the DEC Chair. The system is fully automated to log all iterations, with comments available to the research student, staff and anonymously to committee members. For projects with new ethical concerns, DEC consults with experts, both within and outside the University before making a decision. For ethics related with staff research projects, a final approval is obtained from the College Research Ethics and Integrity Committee after the initial assessment made by the DEC. Of note, **French** was an Associate Pro-Warden (Research Integrity).

## 2. People

## 2.1 Staff Recruitment Strategy

In the current REF period, our recruitment strategy has been to strengthen our five Research Groups (See Sec. 1.3). Since 2014, we have appointed 12 new permanent members of staff (Addyman, Chamberlain, Herrojo Ruiz, Jansari, Mercure, Oliver\*, Omigie, Orgs, Scott, Terhune, Yon, Wright; # denotes leaver). Five of them are affiliated with two of our unique research groups (FCS and SCAPA), reflecting our focused approach towards building a thriving research community, especially in emerging interdisciplinary research fields.

Four newly recruited staff (Herrojo Ruiz, Jansari, Orgs, Scott) have been promoted to Senior Lecturer, and one (Terhune) to Reader. Further, in this REF period, 20 staff (Banissy, Cappelletti, Charlton, Cocchini, Cooper, Custance, Freeman, De Fockert, Goddard, Golec, Gregory, Jansari, Jones, Kovas, Kuhn, Kumashiro, Moore, Müllensiefen, Stewart, Van Velzen, West) have been promoted, and from these, 7 staff members have been promoted to full Professor. These clearly demonstrate our strategic commitment to nurturing and supporting academic colleagues at all stages of their career.



# 2.2 Sustainable Staff Support

Healthy Staff-Student Ratio: Compared to 2014 our 2019 UG intake almost doubled, yet we have maintained a 1:20 staff-student ratio throughout. To protect the research time for staff members on teaching and research contracts, we have appointed several lecturers on teaching-focused contracts who are, nevertheless, well-integrated into our research-led teaching environment.

Support for New Lecturers: The Department is strategically committed towards nurturing newly appointed junior staff as they play a substantial role in sustaining the vitality of its research activities. We have a number of specific measures dedicated towards ECRs: (i) allocation of a teaching module closely related to individual expertise, (ii) lighter admin and teaching loads during the first year of appointment, (iii) access to all of our infrastructure and experimental facilities, (iv) preferential access to Departmental funded Summer Bursary Studentships, (v) appointment of an ECR representative on a fixed-term basis to convene ECR meetings and present issues to the department, and (vi) a smooth integration with the Research Group to which new staff would be primarily associated (e.g., group meetings, journal club, PDR by research group lead).

Transparent and Egalitarian Workload: The Department has two workload models, for teaching and administrative duties, with the aim of balancing loads for each academic staff member, as well as across staff. Teaching loads are calculated according to the number of teaching contact hours, and module and project coordination. Importantly, the Department's egalitarian approach means the teaching load is distributed equally. Admin loads are allocated with the aim of giving each member of staff no more than one substantial role (e.g., Chair of a Departmental Committee) plus a maximum of three minor roles (e.g., membership of Committees). The loads are transparent and made available to all staff.

Staff Training: All staff are encouraged to undertake several training opportunities offered centrally by the University to facilitate research skill development, including support for grant writing, grant management, research impact, network building and knowledge exchange. Staff are given special discounts or free places on short courses, which include both research-related (e.g., machine learning) and professional skills (e.g., leadership development). Support for external training is provided via ad hoc requests made to the Department Management Team (consisting of Head of Departments (HoD), Deputy HoD, Director of Research (DoR) and Department Business Manager (DBM)), which staff are made aware of at Departmental Focus events (held in-person or online on a termly basis).

Staff Progress Monitoring: As part of developing a learning organisation culture, the Department has annual performance and development reviews (PDR) to support all staff. Our annual PDR is designed to (i) assess and receive feedback on the past year's performance, and formally celebrate and record achievements, (ii) flag up any changes in job scope or role, (iii) review existing goals and key objectives (those that cover the main and most important aspects of the job) and agree new ones, (iv) explore and discuss setting objectives and goals for the next 12 months, and (v) put a development plan in place to help improve or maintain performance and to meet personal and professional aspirations. The Reviewers for the PDR are usually Heads of Research Groups (see Sec. 1.3). The PDR is not mandatory except in the year prior to applying for promotion, though most of our academic staff members (36 out of 41) have completed their PDR in recent years.



Staff Research Leave: All academic staff members can pursue dedicated research time (sabbatical) based on the number of academic terms served since their appointment (3 years = 1 term; 5 years = 2 terms; 7 years = 3 terms, 1 academic year). Psychology was the first Department in the University to allow staff to receive a full year's research leave. In the current REF period, altogether 76 person-months of research leave applications were approved, demonstrating our strong commitment to enabling academic staff members to exclusively dedicate their time to a plethora of research activities (e.g., writing papers and/or monographs, analysing old data, submitting research grants, strengthening existing and building new research collaborations, and exploring new research frontiers). Such year-long research leave has led to substantial positive outcomes, and the Departmental Research Committee (DRC) is in the process of setting up follow-up procedures on sustaining and revitalizing activities taken up during a research leave.

Stimulating Impact and Wider Collaboration: As detailed earlier in Sec. 1.5, our impact strategy has supported the generation of impact from our research including direct collaborating with endusers and stakeholders on research projects to explore key issues of importance and, in doing so, contributing towards scientifically informed policy, practice, and/or procedure. This strategy has also enabled staff to reach and influence wider target audiences via the joint dissemination of research findings (see for further details, Sec. 4.1, 4.2, and 4.4). We actively promote collaboration with private or business sectors through various activities, e.g., by active engagement at research networking events organized by the Research Enterprise Office, by inviting industrial partners to research show-case events. Freeman is the Academic Lead Knowledge Exchange at the University level. The outcomes of our strategies for stimulating the widening of research collaboration are evidenced by our staff members holding many consultancy grants (Sec. 3.1), expert and advisory roles (Sec. 4.1).

Altogether, these clearly demonstrate that the Department has attracted top-quality researchers and offered continuous support for the career progression of and development of both existing and new staff, while they have flourished and contributed towards making the Department a thriving research environment. This substantiates both the sustainability and the vitality of the research environment within the Department and further the effectiveness of research support services (see Section 3).

## 2.4 PGR Students

A core strategy during this REF period is to create more opportunities to **expand our PGRs**. Despite postgraduate funding opportunities having been increasingly restricted at a national level, we have achieved this expansion through three strategic initiatives. First, since the previous REF period, we have **increased Department-funded PhD bursaries from around 2 per year to an average of 4 per year**. This double-fold increase reflects our commitment to investing in recruiting and training the next generation of high-calibre psychologists and social scientists. Second, we have been successful with our prior partnership of London Social Science, a Doctoral Training Centre (DTC) funded by the ESRC and collaboration between Goldsmiths and Queen Mary. This DTC completed its term with the last funding round in 2016. The high quality of our PhD applications led to high success rates for us, resulting in 7 studentships between 2014 and 2016. From 2017, the Department became part of the South-East Network for Social Sciences (SeNSS) Doctoral Training Partnership (DTP), also funded by the ESRC. A fiercely competitive, large consortium of 10 universities, we (e.g., **Herrojo Ruiz, Moore, Oliver**) nevertheless have been



successful procuring doctoral funding above our expected intake; notably, some of the studentship awards are based on a research collaboration between our staff and a non-Higher Education Institution (non-HEI) which makes a financial or in-kind contribution to the studentship. Additionally, PhD studentships are arranged via research grants held by individual academic members (e.g., **Moore, Banissy).** Reflecting our longstanding strategical investment in our PGRs we have awarded 62 PhDs in this REF period (45 in the previous REF).

## 2.5 PGR Training

All PGRs have both a first and second supervisor. All students undergo comprehensive training in psychological research methods (unless they already hold an MSc approved by the ESRC) in line with the current ESRC training guidelines, including quantitative and qualitative research methods. They are also offered optional courses that may be relevant for their studies (e.g., MATLAB® Programming). In addition, there are training opportunities on methodological techniques (e.g., eye tracking, EEG, brain stimulation) that PGRs are actively encouraged to attend. Most PGRs also make the most of our optional opportunities to gain valuable experience through paid teaching assistance work, running UG tutorials, marking 1<sup>st</sup>-year essays, etc., with full support and guidance (e.g., marking calibration workshops).

## 2.6 PGR Progress Monitoring

PGRs' progress (as well as training needs) is assessed with their supervisors and recorded termly on the University system. Students initially register for an MPhil until they achieve satisfactory upgrading to PhD status, which is dependent upon satisfactory progress reports, an upgrading report, and a viva; the upgrading report is completed after 12 months full-time (or 24 months part-time) and includes a plan of the thesis, a timetable, and one draft thesis chapter (or equivalent), discussed at a presentation to the Departmental Postgraduate Committee. A similar upgrade takes place at the end of the second year. All PGRs also present their research findings at the Postgraduate Symposium, which is held termly and is open for all staff to attend.

## 2.7 PGR Research Support

All PGRs working full-time have access to their own office space and computer. We have a dedicated PGR community (the PGR-Representative is a member of the DRC), which organises separate talks and workshops at regular interval with focus on informing and training, including grant writing, creating research impact, research dissemination. The Department provides an annual research allowance (£500) to every PGR for their research-related expenses. PGRs are actively involved in our journal clubs (e.g., our widely attended weekly neuroscience journal club is usually co-ordinated by a PGR), seminars (e.g., usually one PGR per Research Group presents at our Research Focus Day held annually). PGRs are also invited to attend job-talks to get further insight into developing their academic careers. Finally, PGRs contribute to outreach activities, including public engagement (e.g., Science Showoff), museum exhibitions, Open Days. Of note, the Warden's Annual Public Engagement Award has regularly been won by Psychology PGRs' a joint win by Kirk (supervised by **Stewart**), Caso and Kenrick (supervised by **Gabbert**) in 2019, and a win by Sanfilippo (supervised by **Stewart**) in 2020.

## 2.8 PGR Career Success



Our PGRs have received distinguished awards (e.g., Kelly Jakubowski, supervised by **Stewart** and **Müllensiefen**, won the Hickman Early Career Researcher Award from SEMPRE – Society for Education and Music Psychology Research and gave a plenary session talk at the ESCOM (2015) Conference), published regularly in high-ranking research journals (e.g., *PNAS*, *Current Biology*, *Neurolmage*, *Sleep*, *Cognition*, *Child Development*, *Developmental Science*). On completion of doctoral research, our PGRs have successfully continued their professional careers by receiving tenured academic positions (e.g., QMUL, Durham, Goldsmiths, Winchester, Bath Spa, London Southbank), postdoctoral positions (e.g., Birkbeck, Cambridge, Oxford, KCL, Sheffield, Sussex, Tsinghua, UPMC – Paris), and jobs outside academia (e,g., National Records of Scotland, Merkle Inc., Avantia Group, NHS). Altogether these substantiate the quality of departmental support and training facilities offered to our PGRs.

## 2.9 Equality and Diversity (ED)

Establishing a Formal Approach: In the previous REF period, our approach towards ED was more informal, but in the current REF period, we have made a robust and strategic change by promoting ED in a formal, consistent fashion. In Sept 2016, we formed the Department's first Equality and Diversity Committee (EDC) led by **Cappelletti** and supported by the HoD, DoR, and 9 other staff members who are representative of the Department in terms of career stages (teaching fellow to Professor), grades (teaching and research, teaching only), and roles (academic and support staff). EDC has conducted a wide range of department-wide surveys, consulted with HR, academic members of staff, and performed a comprehensive assessment of ED related issues within the Department, including identifying both positive practices and others that require specific future actions. All findings and assessments will be included in the Department's forthcoming submission for an Athena SWAN Bronze Award. We have several initiatives and policies in place to develop a fully inclusive culture. Highlights are as follows.

- All key meetings and committees are scheduled between 10 am and 4 pm to accommodate staff with caring responsibilities.
- Our working arrangements are flexible for parents and others with caring responsibilities.
- Staff returning from maternity or sick leave are supported in a flexible manner depending on individual circumstances and/or preferences (e.g., some staff may like to have a reduced responsibility at the time of return whereas others have preferred a more prominent role; HoDs are mindful and pro-active in supporting both preferences).
- Adjustments to work arrangements are made to accommodate individual staff's circumstances, which may include a declared disability, temporary or more long-term caring responsibilities or other reasons.
- Female and BME role models are actively promoted through images and promotional materials on our Departmental website (e.g., online research lectures given by female colleagues, or promoting news items featuring female researchers).
- We are flexible with Conference leave during term time, especially for those staff with parental responsibility so that conference attendance is not limited to school/university holidays.
- Dedicated lunchtime seminar series are organised to increase awareness on practical issues such as work-life balance, being part of the LGBT community, being a minority, and sexual harassment. All staff took mandatory training in sexual harassment and violence awareness, in unconscious bias and anti-racism.



 We have been actively engaged implementing ED policies during recent recruitment. For example, the proportion of female shortlisted applicants has risen steadily from 55% to 74% (2015-16 to 2017-18).

## 2.10 Equality, Diversity and the REF

Of 42 permanent research-active members of staff, 21 identify as female, 8 from BAME backgrounds, and one with a declared disability; more than half are not British-born. Three, out of five, Research Groups are led by female, and thirteen senior (Professors/Readers) staff are female and/or from BAME background. As our REF submission demonstrates, 46% outputs are from female staff and 26% are from BAME staff, which are aligned with the composition of the submitted cohort. Over 40% (13/29) of our top one-third internally ranked outputs are from BAME staff and over 75% of the outputs (66/85) are from staff members within the age range of 35-49 years. Given our high retention rate and promotion success, this reflects the Department's strategic commitment towards nurturing young researchers to help them flourishing and consolidating their professional career over the REF period in order to create a vibrant research environment.

## 2.11 Community Support and Staff Well-being

We are proud of the **strength of our community**, and the **sense of belonging to the Department** experienced by our staff. Our egalitarian model of teaching and various support services makes our responses to a crisis like Covid-19 pandemic possible without overwhelming us. For example, many of our taught courses have joint co-ordinators, and all staff contribute to such tasks as marking, which means that we can flexibly redistribute loads if needed, without need for further training etc. Similar arrangements are also in place for dealing with research ethics, ensuring a smooth running of the relevant processes in a challenging and uncertain situation.

All staff benefit from a Staff Wellbeing Centre at the University that offers a range of activities and support services to develop various facets (social, physical, and mental) of wellbeing. Staff are members of a Choir practising weekly. Within the Department, there is a weekly social meeting (being held virtually during the pandemic).

## 3. Income, infrastructure and facilities

#### 3.1 Income

A key research strategy (see Sec. 1.2) in this REF cycle is diversifying our grant portfolios by holding more grants with non-academic funding bodies (e.g., charities). Compared to 84 grants secured in the previous REF cycle, we have received 110 grants in this period, reflecting an increase of 30%. This has been made possible by our extensive success with UK-based and EU-based charities, reflecting an increase of over 90% from the previous cycle with 20% of our current research income from the charitable funding sector. We have also been successful with grants awarded by traditional funding bodies, both at the national - ESRC, BBSRC, MRC, AHRC, Royal Society, British Academy, and at the international level - European Research Council, Polish National Science, BIAL Foundation. Some highlights include:



- **Orgs** has won an ERC Consolidator Grant on investigating the neuroscientific correlates of liveness experience (2020-25, €1.9M)
- West has won an ERC Starting Grant on investigating the meaning of heterosexuality (2017-22, £746K)
- **Banissy** was awarded an ESRC grant with Univ. Oxford on understanding individual variation in empathy enhancement (£476K). He also held an *ESRC Future Leaders Award* (2013-2016).
- **Gabbert** and **Wright** were awarded a CREST funded project on quantifying the effectiveness of an evidence-based rapport building training programme (2017-19, £100K)
- Rutland was awarded an ESRC grant (2018-2020, £620K) on investigating bystander reactions to the intergroup exclusion of immigrants among British children and adolescents. He also held an International Collaborative Grant between ESRC, Wellcome Trust and NSF (USA) to examine youth educator experiences related to STEM identity, educational aspirations, and motivation (2017-2022, £755K).
- **Terhune** was awarded a BBSRC New investigator grant on elucidating the neurophysiological basis of time perception (2018-21, £342K).
- **Bhattacharya, Banissy** held an EU FP7-ICT grant (2014-17), Creativity enhancement through advanced brain mapping and stimulation (CREAM) (total award of €2.7M with Goldsmiths share of €520K)
- Stewart has received a grant (2018, £185K) awarded via GCRF (Global Challenge Research Fund) to develop a community singing-based intervention for perinatal mental health in the Gambia

We have a strong track-record of contract-based research funded by external non-academic and/or industrial partners, including several Fortune 500 Global companies, tech start-ups, market research companies, media, and performance industries. Highlights include:

- Banissy was a Chief Scientific Officer at OPIÑON Ltd, supported by a prestigious Royal Society Short Industry Fellowship (2018-2019)
- **Bhattacharya** researched functional music in reducing anxiety (supported by Universal Records), brain-hacking inspirations (Microsoft), strategic vs tactical music use in advertising (Radio Center)
- Addyman and Stewart investigated babies' sleep and responses to music (Procter & Gamble, Cow & Gate)
- Banissy and Gregory conducted the largest ever survey on the importance of touch in our lives (BBC and Wellcome Trust)
- Jones Bartoli was contracted by several national bodies including National Autistic Society, Bromley and Lewisham MIND, Lewisham Youth Offending Services, OVO Foundation
- Müllensiefen was the Scientist in Residence for advertising agency DDB Adam&Eve
- Hill collaborated with Guy's and St Thomas Whole Population Project supported by The Reader Organisation to establish reading groups across Lambeth and Southwark
- Jansari investigated cognitive functions in prostate cancer patients supported by Ferring Pharmaceuticals
- Omigie has investigated music usage during the lockdown period (Google)
- Freeman, through his spin-out company i2media, has conducted numerous externally
  funded research projects; the total revenue to i2media during this period is around £2.1M.
   Some of the research projects included media consumption (Facebook), evaluating
  immersive user experience and audience impact (NESTA), enhancing user's experience by



fusing psychology and wireless sensor networks (Innovate UK), driving experience of a hybrid car (Toyota Motors, Saatchi & Saatchi) among many others

## 3.2 Infrastructure

In this REF period, the Department has strategically invested in procuring new equipment to strengthen existing facilities to meet the requirements of our five research groups (see Sec. 1.3). We ensure that these facilities lead towards maximal usage by researchers and students alike to achieve the optimal benefit for research within the Department. All facilities are housed in research spaces that are either freely bookable or under the management of a committee of staff members. For facilities accessed by individual researchers (e.g., those procured via externally funded grants), shared access is usually the norm, supported by the Department's **pump-priming funds** for conducting basic and translational research.

The Department has the following in-house dedicated experimental facilities:

EEG Lab – Extensive facilities for conducting electrophysiological experiments that include four 64-channel EEG units (three Biosemi machines, one purchased during the REF period, both being housed within a Faraday cage, and one 64 channel Neuroscan), one 32 channel EEG (Biosemi), one 20-channel mobile EEG (mBrainTrain, purchased in this REF period). Further, the laboratory has specialised units to monitor heart rate, galvanic skin resistance, and a digital piano synced with EEG machines. Finally, we have procured 15 high-end mobile EEGs (financed jointly by Orgs' ERC grant and the Department) which establishes the Department as a crucial hub for mobile cognition.

Infant Lab —a 128 channel EEG unit (EGI machine with geodesic sensor nets suitable for both babies and adults), an 8 camera Motion Capture system, and a stimulation/observational suite with a camera synced to stimulus presentation and digital video recording capacity. Other equipment allows the presentation of multisensory (visual/auditory/tactile) stimuli.

BrainStimulation Lab – We have two transcranial magnetic stimulation (TMS) machines (one capable of rTMS; both purchased during the REF period), a Brainsight co-registration system including camera (purchased during the REF period to replace a former system), bespoke software, 6 transcranial electrical stimulation devices (for delivering direct current, alternating current or random frequency stimulation; several purchased during the REF period), and EMG for work on motor thresholds and motor cortex excitability. Further, **Banissy** (Co-Director of Lab) is an Advisory Board Member to Brainbox (a multimodal neuroscience equipment provider), and through this relationship, the Department has additional access to the following on an ad hoc basis: EEG compatible brain stimulation systems, cTMS, quadripulse TMS, and multi-channel tES devices.

Eye-movement Lab – Several state-of-the-art high precision and high-resolution eye trackers (Eyelink 1000, Eyelink Portable duo, Eyelink 2) that determine where people are looking, as well as measure other oculomotor functions (e.g., pupil dilation). These are also integrated with EEG recording equipment. Additionally, we have eight mobile Pupil Lab Eye Trackers to measure eye movements in natural environments.

*i2Media Lab* – A Goldsmiths' spin-off company based in the Department since it was founded in 2002, i2Media Lab's facilities include a room-scale VR space housing Virtual Reality and Mixed



Reality Systems (2 HTC Vive, 1 Oculus Rift, and 2 Magic Leap), eye-tracking equipment, facial expression analysis software.

*Investigative Interview Lab* - Two rooms, separated by a one-way mirror, allow for an interview suite and observation room set-up. The interview suite resembles that used by the police and has full audio-visual recording equipment.

#### 3.3 Facilities

The Department has an array of other facilities which include; more than 20 experimental testing rooms/cubicles equipped with up-to-date research computers and associated software; several mobile sensing devices for measuring a range of physiological measures such as galvanic skin resistance, heart rate, and body movement; a psychoacoustic chamber; dedicated computational facilities for modelling and neuroimaging data analysis. We have a dedicated team of Departmental technicians with IT, software development, electronics, and mechanical expertise.

## 3.4 Large Datasets

We are committed to the reproducibility research culture, and therefore, we actively collaborate with several national and international institutes to ensure our staff have access to large databases (neuroimaging and multi-modal complex data recruited from a large sample). Specific highlights include (i) Sirius, Sochi, Russia (Individual differences in education and achievement study), (ii) Institute of Psychiatry (MRC Environmental Risk Longitudinal Twin Study, G1219 twin/sibling study, Twins Early Development Study) and (iii) Kanazawa University, Japan (investigating biomarkers of cognitive and mental deficits in preschool children). Importantly, we make sure that our early career researchers have full access to these large and unique datasets, enabling them to advance their research skills, publication record and strengthening their grant applications.

## 3.5 Widening Participation

We are mindful about the WEIRD effect in psychology/neuroscience (i.e. research findings based on a limited homogenous pool of participants), so to diversify our participants' pool, our panels include: (i) paid participants recruited locally within and around Lewisham, a diverse London Borough, (ii) paid participants recruited via various platforms like Testable, SONA, Prolific, MTurk, (iii) databases of infants and/or young children as maintained by our Infant Lab, (iv) databases specific to older adults, individuals belonging to special populations including autism, alexithymia, developmental prosopagnosia, synaesthesia, young children with various types of developmental disorders among others.

#### 3.6 Research Governance

Research Policy and strategy in the Psychology Department is overseen by a Research Committee chaired by the Director of Research. Its membership reflects the composition and breadth of the diverse research conducted within the Department. Specifically, it comprises the Heads of all five Research Groups, Chair of Equality and Diversity Committee, Director of Postgraduate Research, Research Funding Lead, Research Impact Lead, Chair of Ethics Committee, Public Engagement Lead, Open Science Lead, and Head of Department. The Research Committee meets every term to report and discuss all research-related activities within



the Department including developing research strategy, monitoring funding opportunities, planning, and progressing grant applications, PhD studentship awards, allocation of Summer Bursary Studentships, research leave applications, pump-priming awards, sustaining and improving research infrastructure, creating opportunities for research collaboration, dissemination, and knowledge exchange.

## 3.7 Research Support Services

In order to implement our research strategy effectively the Department has established various research support services as follows: (i) subsequent to the last REF we appointed a dedicated Research Administrator (RA) to provide critical support at various stages including grant applications, post-award and grant management; (ii) the DoR and the RA, with input from the University's Research Services, inform departmental staff regularly about upcoming suitable funding opportunities; (iii) we conduct an internal grant review panel (consisting of DoR, Research Group Leads and RA), on a termly basis, to provide staff members with critical and constructive feedback on their grant proposals; (iv) for FEC grants, all named investigators are given a share of research overheads to flexibly support their research activities (e.g., conference travel, participation payment, article processing charges).

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

#### 4.1 Collaboration, Networks and Partnerships

Collaboration Outside Academia: Members of the Department have demonstrated a range of approaches to interact and engage with non-academic end-users, stakeholders, and other beneficiaries of our research. This has resulted in us developing strong relationships with a wide range of non-academic groups including industry, business, policymakers, government and non-government agencies, schools and the public.

For example, **Jones Bartoli** collaborates with local schools and a regional educational psychologist to evaluate a new behaviour policy for children with social, emotional, and mental health needs. Early-stage impact includes a change to school policy, demonstration of positive changes to student behaviour and teacher job satisfaction, and a marked reduction in spending on student-caused damage to school and teacher property. **Jansari** has worked with clinicians and consultants to refine and test a novel assessment of cognitive executive functions that is now being trialled in the UK, Iran, and Russia. **Charlton** is collaborating with the Autism Diagnostic Research Centre and Network Autism to examine data about autism across the adult lifespan, with the goal of influencing care planning and policy making within this population.

Many of our staff members have received research grants from industry. For example, **Bhattacharya** has received project grants from Microsoft, Universal Records; **Freeman** has received grants from dozens of companies over the years (Facebook, Toyota Motors, NESTA etc to name a few); **Addyman** and **Stewart** collaborated with Cow & Gate to create the world's first scientifically tested song to make babies happy (with over 12 million views on YouTube and securing the number one spot on the iTunes' children chart). Several of our research collaborations with private companies have helped secure additional funding for our PGRs (**Moore**'s collaboration with Ultraleap resulted in a doctoral studentship; **Herrojo Ruiz**'s collaboration with Sony has brought funded research internships for our students).



Our staff members also work directly with industry and the public sector in an advisory capacity to provide targeted expertise where needed. For example, **Banissy** is the Chief Scientific Officer of OPIÑON and an Advisory Board Member to Testable and Brainbox Initiative; **Müllensiefen** has been a Scientist in Residence with Adam&EveDDB. **West** has advised lobby and activist groups about predictors, antecedents, and methods of reducing prejudice that has resulted in reducing severe sexual prejudice in Jamaica and similar societies. **Gabbert** has advised the Independent Police Complaints Commission (IPCC) on their development of guidance on post-incident management.

Contribution to Changing Policy: Making a positive difference to people's lives lies at the heart of our research (see Impact Strategy in Section 2 and our ICS). Several researchers engage in policy-shaping activities through national and international bodies. For example, **Kovas** is a Member of the Steering group reviewing couple relationships and child outcomes for the Department for Work & Pensions (DWP), UK. **Gabbert** advises the United Nations on the development and drafting of a Universal Protocol on Investigative Interviews which will support the legal prohibition of torture by introducing ethical, non-coercive and evidence-based policy and practice to facilitate the disclosure of reliable information. She is also a member of an influential Reviewing Committee for the revised Istanbul Protocol, which is the main instrument for the assessment and documentation of torture and ill-treatment.

International Academic Collaboration: Our staff are actively engaged with research collaborators from over 20 different countries, 50 different institutions that are world-leading and research-intensive. Some examples include: CalTech, Harvard, Columbia (USA); McGill, U Montreal, UBC (Canada), INSERM (France), Max Planck Inst Human Cognitive & Brain Sciences – Leipzig, Charite, U Heidelberg (Germany), U Tokyo, NTT Labs (Japan). Further, we actively support our staff holding Visiting Professorships or adjunct positions elsewhere. For example, **Bhattacharya** held a Visiting Professorship at the Indian Institute of Technology – Kharagpur, India, supported by the GIAN Initiative, Government of India. **Terhune** was an Associate Investigator at the ARC Centre for Excellence in Cognition and its Disorders, Macquarie University, Sydney (2015-18). **Kovas** is a Visiting Professor at Tomsk State University and Moscow State University. **Herrojo Ruiz** is a Senior Research Leader at the Higher School of Economics, Moscow. **Golec de Zavala** is a University Professor at the SWPS University, Poland leading a large grant funded by the Polish Science Foundation. Finally, **Müllensiefen** heads the LongGold project at the University of Music, Drama and Media at Hannover, Germany.

#### 4.2. Indicators of Wider Influence

Reaching wider audiences is a critical dimension of our research strategy as it strengthens existing research enterprise, consolidates and extends our research network, and further, can herald new lines of enquiry.

Fellowships: Our staff have received distinct recognitions from prestigious professional bodies for their invaluable research contributions to psychology. For example, in the current REF cycle, **Bhattacharya** and **Kovas** were elected Fellows of the Association for Psychological Science (APS); **Terhune** became a Fellow of the Society for Clinical and Experimental Hypnosis; **Golec de Zavala** became a Fellow of the Society of Experimental Social Psychology; **Smith** received an Honorary Doctorate from the University of Vienna.



Prizes: Our research excellence has been recognised by prestigious prizes and awards given to our staff at all career levels. For example, at the early career level, **Banissy** was awarded the British Psychological Society Spearman Medal (2016) and Bertelson Award (2017); **Von Stumm** won the APS Rising Star Award (2015) when she was in the Department; **West** received the Michele Alexander Early Career Award for Scholarship and Service by the SPSSI, and **Terhune** was recognised with a Presidential Award (2014) by Society for Clinical and Experimental Hypnosis and an Early Career Award (2015) by Division 30 of the APA. At the mid-career level, **Gabbert** won a Mid-Career Achievement Award (2016) by the European Association of Psychology and Law (EAPL) for her pioneering contributions in the field of eyewitness testimony and investigative interviewing; **Müllensiefen** received the Anneliese Maier Research Prize (€250K) by the Humboldt Foundation. Finally, at the senior level, **Smith** was the recipient of the Iliam Thierry Preyer Award (2015) for excellence in research on human development by the European Society for Developmental Psychology.

Editorial and Peer-review Process: Our staff are committed to the peer-review process for academic journals in various capacities including Editor-in-Chief (e.g., Jones Bartoli, British Journal of Educational Psychology), Associate Editors/ Editorial Board Members/ Consulting Editors (more than half of our staff members are fulfilling such roles including Gregory – Sleep, Kovas – Intelligence, and West – PSPB). Our staff are regularly invited for their expert evaluations by funding bodies at the national level including ESRC Panel Member/Peer Review College (Banissy, Charlton, Gabbert, Kovas), and at the international level (DFG Panel, Germany – Gregory; Banissy – NSF; French – John Templeton Foundation; Terhune – ERC; Müllensiefen – FWF, Austria; West – Israel Science Foundation, to name a few). Smith was formerly panel chair of the ERC Consolidator SH3 panel.

Scientific Conferences and Keynotes: Our researchers are actively engaged with organising academic conferences/workshops, or special symposium/sessions for disseminating and exchanging research ideas/findings. For example, **Orgs** is an organiser of the IAEA-2020 (International Association for Empirical Aesthetics), a premium biannual conference on the science of aesthetics. **Gabbert** is the Co-organiser of the annual International Investigative Interviewing Research Group conference (hosted in London, 2016; Monterey, 2017; Porto, 2018, Stavern, 2019). Our researchers hold important positions in several professional societies. For example, **Kovas** was an Elected Member of the Board of Directors of the International Society for Intelligence Research (2012-17), **West** was elected to the governing council of The Society for the Psychological Study of Social Issues (2016) and to the BPS Social Psychology Section (2015). More than half of our members have been invited to give Keynotes (highlights include: **Banissy** – BPS, 2017; **Gabbert** - American Psychology and Law Society, 2020; **Kovas** - Brain and Culture Symposium, Karolinska Institute, Sweden, 2019).

## 4.3 Research-led Teaching

A core value in our Departmental ethos is research-led teaching, and to engage and nurture psychology undergraduate (UG) students. For example, **Charlton** won the Student-Led Teaching Award for outstanding use of research in teaching awarded by Goldsmiths' Student Union (2016). **West** won an SPSSI (Society for The Psychological Study of Social Issues) Award for his outstanding teaching and mentoring. Further, we take the role of research supervision of our UG students seriously, and there are numerous instances of UG students publishing their research



findings in academic journals (e.g., *Autism Research*, *Empirical Studies of the Arts*, *Psychopharmacology*, *Cognitive Neuropsychiatry*, *Neuropsychologia*). We offer a substantial number of summer bursary research fellowships every year to second year UG students to work on a two-month research project. We also arrange occasional overseas visits of our UG students (e.g., to Tomsk State University, Russia for a two-month placement funded via Erasmus).

## 4.4 Research Dissemination

We take the role of broad dissemination of our research findings to our hearts (see Impact Strategy in Sec. 1.5). For example, Herrojo Ruiz won the Spanish National Research Council's Public **Engagement Award** for her contribution to the radio programme Longitud de Onda (Wavelength), which is broadcast by the Spanish Radio and Television Corporation (RTVE). Several researchers write regularly for leading media outlets (e.g., The Guardian – French, Gregory; The Conversation - one of **Gregory**'s articles has a view count of over half a million, **Moore** has championed science as a way to fight inequality). Our research findings are routinely covered by national and international media; for example, exclusive reports on **Bhattacharya**'s research on the musicinduced brightness bias are shown on BBC, ITV, and Sky primetime news; Stewart's research on earworms has been covered by The New York Times, CNN. Other dissemination examples include Addyman – "Babies: their wonderful world" BBC documentary; Stewart – BBC Radio3 documentary about David Baddiel's relationship with music; Douglass-Kirk, supervised by Stewart ran a series of expo workshops on World Stroke Day with over 100 stroke survivors and carers attending the event; Müllensiefen – BBC One Show (TV) on musical plagiarism featuring his computational tools for melodic similarity. West's research on naturist activities and life satisfaction was widely covered by the media which resulted in his appointment as a presenter the 2020 Channel 4 series "The Beach".

We organise seminar series, special events, and engage with exhibitions with a broad outward focus towards the general public. For example, French organises an Invited Speaker Series on anomalistic psychology at Goldsmiths and further runs Greenwich Skeptics in the Pub, both of which are widely attended. **Kuhn** and **French** contributed to 'Smoke and Mirrors: The Psychology of Magic' exhibition at the Wellcome Collection, London. Banissy has collaborated with artist Daria Martin for the 'At The Threshold' and 'Sensorium Tests' installation in the 'Somewhere In Between' exhibition at the Wellcome. Müllensiefen is engaged with BrainCanDo Conferences on educational neuroscience. Our Forensic and Clinical Science Group members (Wright, Gabbert, Scott) have organised annual sell-out immersive science-theatre events, e.g., 'The death of Jane Doe - The Psychology of a Murder Investigation' in collaboration with Creative Vortex, a multimedium production company; this event was the Winner of the CorpComms Magazine Award for best communication by a public sector organisation. An hour-long documentary on Channel 4 (April 11, 2019) was fronted by **West** based on his own research to use nudity to improve body image and well-being. Finally, working with BBC and the Wellcome Trust, Banissy and Gregory conducted the Touch Test and collected data from over 50,000 participants based in 112 different countries to understand the importance of touch in our lives, a critical issue in the pandemic context, and their findings have been covered by media outlets worldwide.

To summarise, the Department of Psychology at Goldsmiths prides itself on a dynamic, vibrant and collegial environment, where early career researchers are nurtured, real-world issues are investigated, and interdisciplinary research boundaries are explored and breached. We combine



academic rigour and excellence with innovative approaches to research, broadening its impact and making us a unique and a highly creative Psychology Department.