

Institution:	Goldsmiths, University of London
Unit of Assessment:	04 Psychology, Psychiatry & Neuroscience
<b>I. Overview</b>	

Psychology is a thriving, vibrant centre of excellence in which research permeates all our activities and integrates academic staff (n=38, 34.7fte, up to end July 2013), researchers (n=10; 9.5fte) and research students (n=52; 43.5fte) based in the Department of Psychology and/or Goldsmiths' newly established Institute of Management Studies [IMS] which is directed by our Professor of Work Psychology (Bond). This REF period has been one of highly dynamic expansion, enabling us to develop our local, national and international research partnerships, with strong backing from the College's investment in our infrastructure and personnel (academic FTEs have increased by 33% within the period). As we show below, we are well-established within Psychology and its related disciplines nationally and internationally and are at the forefront of success within Goldsmiths: for example in the 2011 QS Psychology rankings we placed in the UK top 20 overall, and 8<sup>th</sup> for research publications. Given the prominence of neuroscience research in contemporary UK psychology, our achievements in this area are particularly striking given Goldsmiths' primary focus on arts and humanities and its absence of natural or life science departments.

Our research can be summarised in terms of 4 broad thematic clusters which have evolved naturally from the 6 clusters in RAE 2008. The current clusters are: **applied psychology** (broadly construed); **brain and cognition; individual differences, social processes and psychopathology; typical and atypical development**. The clusters are not traditional research groups, serving primarily as a descriptive and organisational device. Our overarching research philosophy is to ensure a dynamic and fluid exchange of research ideas and activities within the department and beyond, and we encourage this within our wider strategy (see *b* below) by attempting to recruit and retain excellent junior staff with a particular attitude to, and aptitude for, boundary-crossing research activities. As a result most staff have active research interests relating to more than one thematic cluster.

Research activity is focused in four formally-constituted Units (with advisory boards and/or external members): the *Anomalistic Psychology Research Unit [APRU]*; the *Unit for School & Family Studies [USFS]*; the *International Laboratory for Interdisciplinary Investigations into Individual Differences in Learning [InLab]*; and the *Sensorimotor Development Research Unit [SDRU]*. InLab and SDRU were established since RAE 2008. Much work is underpinned by well-equipped laboratories centred on the work of a small group of staff with their students and researchers, including: *Brain Stimulation Lab; Culture and Cognition Lab; EEG Lab; Face Lab; Infant Lab; Interpersonal Self Lab; Music Mind and Brain Lab*; and the *Science of Magic lab*. Following recent appointments, an *Eyewitness Research Lab* is being developed. A commercial research company (*i2media*; directed by Freeman) resides within Psychology and leads, or partners in, a number of largely EU-funded programmes of academic research in human factors (see *e* below).

<b>b. Research Strategy</b>
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This is developed by the Department's Research Committee [DRC] jointly led by the HoD and Head of Research, in consultation with all academic staff via termly meetings. We have been successful in achieving our RAE2008 strategic aims, of which one was to develop high quality neuroimaging research, building on a major financial investment in EEG labs and the appointment of EEG researchers (**Bhattacharya, van Velzen**) just prior to RAE 2008. Since then we have added transcranial magnetic and direct current stimulation facilities (see *d* for details). This has been consolidated in this REF cycle by outstanding appointments at lecturer level (**Banissy, Moore, Cappelletti**) who have the expertise to further strengthen our cognitive neuroscience profile. In keeping with our boundary-crossing research ethos, many other researchers have begun to utilise EEG methodologies in their research (**Bremner, Cooper, Heaton, Hill, Jones, Pickering**). Recent appointees have come to Goldsmiths specifically because we facilitate the application of neuroscience methods within existing research topics.

Another RAE08 aim was to develop behavioural genetics as a major research strand, with two lecturer appointments in this area (**Gregory, Kovas**) having just been. Since 2008 we have

additionally appointed **Jones**, who has expertise in this field, and formally established a new Unit [InLab] which coordinates much of our behavioural genetics work (see *d* for InLab funding details).

Research on music cognition was a recent development prior to RAE08, and we have strengthened this by appointing **Müllensiefen** to a permanent post and by creating a research-led MSc in Music Mind and Brain (from 08/09). This internationally unique programme attracts high quality national and international students; several graduates have gone on to research careers (two have recently completed PhDs elsewhere), mirroring the trajectories of students on our longer established MScs.

RAE08 feedback on UK Psychology noted that two key research areas, Individual Differences and Social Psychology, were under-represented nationally compared with the US and Europe. We have since reinforced our existing Individual Differences expertise through further strategic permanent appointments (**Cooper, von Stumm**). We have also very recently appointed several strong social psychologists (**Golec** from 01/10/13, **Rutland** and **West** from 01/09/13) to add to our existing staff researching social processes (**Blumberg, Custance, Kumashiro, Smith**). Collectively these appointments have allowed us to broaden and strengthen our important thematic cluster, *Individual Differences, Social Processes, and Psychopathology*.

We played a leading role in the successful Goldsmiths/QMUL bid for an ESRC Doctoral Training Centre [DTC], which has a Psychology pathway; its academic director is **Pickering**, a member of our staff. The RAE08 Psychology Panel noted our success in obtaining funded studentships, observing that: “*Research student and studentship numbers have been consistently good throughout the assessment period, and the number of OST / Research Council studentships was high*”. Our active engagement with the DTC continues our strategic trajectory of PGR growth, an aspect of the research base so important to us that we internally-fund 2 full PhD studentships each year (see *cII*).

Another strategic focus is to prioritise research with relevance and application in the real world, and to encourage attempts to shape the public agenda and the wider understanding of psychological issues. Senior staff have taken university-level roles to lead on Goldsmiths’ activities in this area: **Powell** has been PVC for Research & Enterprise for most of the REF period; **French** chairs the Goldsmiths Public Engagement Group (of which **Gabbert** is also a member) and the College Research Ethics Committee; **Hill** is part of Goldsmiths’ Impact Strategy Group. Psychology has identified research impact as a dimension of our work for targeted development over the next five years and so in 2013 appointed a senior applied psychologist (**Gabbert**) with the expertise to support all staff in the development of this aspect of their research; another new lecturer, **West**, was appointed in part because of the potential of his research to achieve important impact.

We make systematic use of social media and the Goldsmiths Press Office to promote and disseminate our work effectively outside academia. Internationally wide-reaching recent examples include **Bhattacharya** on the [Eureka moment](#); **Custance** on dog empathy; **French’s** Halloween Challenge; **Linnell** and colleagues on living in an urbanised environment; **von Stumm** on the impact of fast food on IQ; and **Williamson** on ‘earworms’. Our staff are highly involved in diverse public engagement activities – for example, Science Museum residencies (**Stewart, Valentine**) and appearances on the Today programme and Wellcome’s ‘*I’m a neuroscientist get me out of here*’ (**Stewart**). Other staff who frequently appear in the media or at public events and use social media to disseminate their research include **Banissy, Hill, Jones, Kuhn, Moore, Müllensiefen**.

Our research activities interface with other Goldsmiths’ departments, through shared teaching and research projects (e.g. with Design, through **Freeman**); collaborative large grant applications/awards (e.g. **Bhattacharya, Freeman, Moore, Müllensiefen** with colleagues in Computing, Music, Media & Comms); and research projects that cross the cultural/health divide (e.g. **Hill** is working with creative writer Blake Morrison in English to investigate the mental health benefits of reading groups). We also use our expertise to inform institutional activities by working with professional support colleagues (e.g. **Jones** with the Disability team, **Bond** with HR).

More broadly, our research serves Goldsmiths’ overarching strategic objective of being strongly engaged in ‘London and the World’. Thus we continuously develop research links with a range of local community organisations (e.g. Lewisham Borough Council, Kids Company, hospitals, primary schools) and with academic institutions across the globe (see *e*), enhancing both their activities and

our own capacity to undertake diverse and original collaborative research, for example that bringing together our expertise in typical and atypical development, cross-cultural perception, and sensorimotor processes (**Bremner, Davidoff, de Fockert, Heaton, Linnell, Hill**).

We use a range of mechanisms to support research development. Goldsmiths has a generous policy of returning 30% of grant residuals (overheads) to departments, and we split this 50:50 between a general departmental research budget and grantholders' personal research accounts. The College likewise incentivises consultancy by retaining only 10% of any surplus centrally; department policy is to return 80% to the staff member, using the remainder to support our R&E activity more broadly. Thus we use our research budget to pump-prime pilot data collection for grant applications, which we additionally facilitate through flexible allocation of non-research duties and periods of research leave (typically one term in seven). We embed the research of UG and PG students and interns into our research labs and academic outputs; and we work closely with Goldsmiths' Research and Enterprise teams which help identify sources of research funding and provide tailored and individualised support in developing application. Feedback from UK and international applicants for posts suggests that this is an attractive package.

**Over the next REF period** we will engage in a strategic drive to increase grant income; to this end we have recently appointed a specialist Research Administrator (new post from July 2013) to support large grant applications, and will be investing in our neuroscience labs and in increased computing power to support the large datasets in our epidemiological/longitudinal work. To summarise our objectives: (i) strategic appointments and improved infrastructure will further enhance our research productivity and quality; (ii) Goldsmiths' psychologists will be even more strongly identified in the public consciousness with innovative work; (iii) a higher proportion of our research will achieve significant impact outside academia; and (iv) we will have continued our innovative collaborations across psychological sub-disciplines.

## c. People

### I. Staffing strategy & staff development

The period since RAE08 has seen exceptional growth. We made 13 permanent appointments by July 2013 (**Ahmetoglu, Banissy, Charlton, Cooper, Gabbert, Guenole, Jones, Kuhn, Lloyd, Moore, Müllensiefen, Rutland, von Stumm**), and four more made in May 2013 have taken posts between then and end October (**Cappelletti, Golec, Hosang, West**). For teaching reasons, our occupational psychologists moved to Goldsmiths' newly established *Institute of Management Studies* (IMS; (**Bond, Guenole, Lloyd**)). We maintain close links with these staff, who are entered in this UoA. Their replacements, plus several other new posts created to accommodate growing student numbers, have been deployed strategically, as detailed in *b*. In addition, 14 staff have been promoted: **Banissy, Bhattacharya, Bremner, Cooper, de Fockert, Gregory, Heaton, Hill, Jones, Kovas, Linnell, Moore, Mullensiefen, Stewart**.

We ensure a sustainable staffing structure by appointing across the full range of experience and seniority. Moreover, an excellent record of promotion reflects and supports our strategy of appointing and retaining strong junior staff. New Lecturers are allocated reduced teaching and admin loads for the first year, along with some start-up funds, to kickstart their independent research programmes. Staff research leave and visit requests are generously supported, with colleagues covering for one another on a *quid pro quo* basis; this works only because staff retention is so strong. All staff have a mentor, and an annual Personal Development Review at which research plans, strategies and successes are a key focus, plus a minimum of one annual meeting with the HoD. Competitive internal research funding (bursaries, pump-priming funds) is generally weighted in favour of junior staff.

Early Career Researchers [ECRs], defined here as all those who do not hold tenured academic posts (PGR students, RAs, postdocs) are closely integrated into our research community: they are encouraged to attend training courses, and are highly involved in our journal clubs, seminars, outputs, grant bids, and public engagement work. The HoD ensures that development opportunities such as committee memberships are available to ECRs as well as to established staff; thus we have recently appointed ECRs to our Computing & Technical Services and Ethics committees. They are also invited to attend the presentations given by candidates for academic posts, to develop their

insight into what they will themselves need to do as they develop their careers. All have dedicated desk space/computing facilities, a line manager and mentor, and teaching opportunities, and a vibrant 'real life' ECR community is complemented by a VLE-enabled 'virtual' one.

Established staff collaborated with ECRs in developing a development programme tailored specifically to their needs; launched in 2012/13 and very well attended, its topics include conference presentation, grant writing, and teaching. We have also created and support opportunities for ECRs to gain experience through placements/collaboration with advertising agencies, educational services, manufacturers and digital consumer industries (e.g. our *i2 media*, *JoJingles*, *adam&eveDDB*).

Reflecting our commitment to ECR development, in 2012 we hosted a DTC- and HEA-funded workshop for ECRs around the country. **Williamson**, then our ECR mentor, was employed part-time by the Research Office to work on Goldsmiths' Concordat implementation plan, and **Linnell** was appointed to the College group overseeing it, representing the perspective of a research manager. Many of our existing practices and resources were adopted for the College's overall Action Plan and operational policies which now apply across all departments. Goldsmiths was awarded the HR Excellence in Research badge as a result of this plan, and we now utilise the Manager / Researcher checklists that form part of it. **Fancourt**, a Psychology PhD student, has recently been appointed as the College's Researcher Development Officer.

We actively promote equality and diversity formally and informally. We support staff returning from maternity or sick by temporarily reducing their responsibilities and ensuring regular meetings with their mentor and/or HoD. We offer flexible individualised working plans for carers. The times of weekly seminars vary over a 3-year cycle to ensure they do not exclude those with particular constraints due caring responsibilities, fieldwork commitments, etc. Our appointment processes involve staff at all levels of seniority, and in evaluating research excellence they take account of career breaks and other factors which may have impacted on applicants' productivity. Candidates meet staff from varied backgrounds throughout the selection process. Our gender balance is good at all levels: we have a high proportion of women in senior roles, including 30% of our Professors. **Hill**, **Pickering** and **Stewart** completed the College's REF E&D training; **Powell** (now Deputy Warden) has led on the REF process across the College and is now orchestrating institutional engagement with gender representation schemes including Athena Swan (which will be spearheaded by Psychology and Computing) and Aurora.

## II. Research students

In an internal anonymous survey our PGRs reported being fully integrated into the "interactive and intimate", "friendly and egalitarian" departmental research culture with "almost complete lack of division between students and staff". In *c(1)* we listed various mechanisms which promote this integration. Students' research skills are developed through high quality supervision from staff whose research is top quality and inspiring, and by opportunities to develop projects with advice/co-supervision from colleagues at other institutions (e.g. Birkbeck; Imperial; Kings; Queen Mary; UCL). Many formal and informal opportunities for staff-student interaction include: compulsory student presentations and poster days; three weekly speaker series, one of which is joint with Computing; weekly lab group meetings; and monthly meetings relating to our thematic clusters or research techniques where discussion topics, journal clubs, and conference rehearsals are decided by staff/students according to current needs. Like RAs and postdocs, all PhD students have shared office space near their research facilities and supervisors.

In *b* we stressed the strategic importance we place on research students and funded studentships. We have maintained our numbers of externally funded PhD studentships in the context of national reductions. Thus, since the 2011 inception of the ESRC DTC, Psychology has received 8 of the 25 studentships awarded to Goldsmiths, several of which were created via 50:50 matched funding from the College. Staff grants (ERC; Leverhulme; MRC/ESRC; NIHR) have supported another 4 fully-funded studentships and have part-funded others. In addition, the Department invests research funds in fully-funded PhD bursaries, typically 2 p.a. at RCUK rates with modest teaching requirements, and has jointly funded a studentship (2011-14) with research collaborators at Imperial/Hammersmith Hospital. The department has four DTC International PhD Partnership awards which enable reciprocal student and supervisor exchanges with India, Russia, China and

Japan. We strongly support CASE-style PhD opportunities; thus for instance **Smith** and **Powell** have supervised students with financial contributions from the NSPCC and the Royal College of Psychiatrists. Wherever appropriate, students are encouraged to work directly with end users on projects, and we endorse projects that may develop technological applications in the future, for instance a recent joint *i2 media*/BBC PhD on audio description, supervised by **Freeman**.

We give £300 p.a. research budgets to all non-ESRC students, and plan to increase this next year. Some supervisors support PGs from their own research accounts, enabling students to lead many conference presentations, outputs and small grant applications. Staff have, with DTC assistance, provided advanced training workshops and activities open to UK PhD students (eg EEG analysis workshop, 20/06/12). Finally, despite challenging research training expectations for non-ESRC funded students, we have continued to improve our retention and completion rates since RAE 2008.

#### (d) Income, infrastructure and facilities

Since 2008 we have gained external research funding totalling circa. £4.7m with awards from most *major* funders, including: AHRC, British Academy, EPSRC, ERC, ESRC, Leverhulme, Royal Society, Wellcome. Here we have space just to summarise a few of the larger ones:

- **Bhattacharya** won £143K from Japan's Science & Technology Agency (2004-10) to research implicit brain responses, and an EPSRC grant jointly with QMUL to investigate neural dynamics (total award >£1m, £758K to Goldsmiths; 2010-13). He and **Banissy** are partners on an ERC grant awarded in late 2013 on enhancing creativity (€2.7M, Goldsmiths share €520k).
- **Davidoff** was PI on two ESRC grants, one with Aston (2007-10, £515K) investigating the development of object recognition into adolescence, the other with **Bremner**, **Linnell**, and **De Fockert** (2009-12, £507k) for cross-cultural research on visual perception and attention in a non-westernised African tribe; this has produced numerous outputs (two of **Linnell's** REF outputs).
- **Freeman** has been awarded a series of EU grants. He currently leads 16 European partners on a €9M project (€1M to Goldsmiths; 2010-14), *Collective Experience of Empathic Data Systems* (CEEDS) funded by the Future & Emerging Technologies [F&ET] programme to investigate subconscious responses to representations of large datasets. He also held an EC award of €280k via the Department's spin-out *i2media* for the project *Community Network Game* (2010-12) which evaluated user experiences of online games. The latest *i2media* project is *MindSee* (2013-16; €330k from total award of €3M). This is another F&ET project which uses psychophysiological responses to enhance user experience of PC-based scientific literature searches.
- **Kovas** was awarded a prestigious 'Leading Scientist' grant from the Russian Federation's Ministry of Education & Science (2011-13). She holds the bulk of this £3M grant at Tomsk State University, with £100k at Goldsmiths for researcher and infrastructure support. It additionally funds Goldsmiths internships. Key elements involve long-term collaboration on developing a Russian Twin Registry, and genetically sensitive cross-cultural investigations (UK, Russia, China) of individual differences in the learning of STEM subjects.
- **Smith** won an EU COST Action IS0801 grant on '*Cyberbullying: coping with negative and enhancing positive uses of new technologies, in relationships in educational settings*' (2008-2012, €450k). He chaired this Action, covering 28 countries, with the grant held at Goldsmiths. The work was supported by smaller UK government awards, e.g. on evaluating anti-bullying strategies (DCSF £160k, 2008-10), and by partnerships with other EU projects (e.g. DAPHNE 2010-12, *Cyberbullying in adolescence: A project in 6 European countries*; €690k total, €110k to Goldsmiths).
- **Stewart** has held grants from the Leverhulme Trust (£300k; 2011-4) on *Spontaneous Musical Imagery as a model of involuntary cognition* and the ESRC (£380k; 2008-11) on *Fractionating the Musical Mind: Evidence from Congenital Amusia*.

Other large awards testify to our development of new research leaders: **Banissy** has an ESRC Future Research Leaders grant (2013-6; £300k) to work on enhancing the perception of social facial cues using non-invasive brain stimulation; **Bremner** won a €1.2M ERC Starter Grant (2009-14) which investigates multisensory development in typically and atypically developing children.

Since 2008 we have invested department funds in expanding infrastructure to meet our increasing portfolio of research activities. New facilities include: an Eyelink 1000 eye tracker and a 4-camera

Optitrack Motion Capture system enabling precise tracking of body movements for adults, children and infants for use both on its own and in sync with the Infant lab system (see below). We have also developed the facilities of specific labs via grant support (ERC, BA, Royal Society):

- The *Infant Lab* has added a 128-channel Geodesic EEG System 300, with sensor nets to fit babies through to adults, an 8-camera Optitrack Motion Capture system, and a stimulation/observational suite with cameras synced to stimulus presentation and digital video recording capacity. Other equipment allows presentation of multisensory (visual-auditory-tactile) stimuli.
- The *Brain Stimulation Lab*, set up in this REF period, has 2 Magstim rapid transcranial magnetic stimulation (TMS) machines, a Brainsight coregistration system including camera, computer, and bespoke software, 4 transcranial direct current stimulators, and EMG for work on motor thresholds and motor cortex excitability. These recently added systems complement existing facilities which include: 35 experimental testing rooms/cubicles; a dedicated EEG lab with one Neuroscan and two BioSemi 64-channel systems, two Faraday cages, plus EMG and GSR recording; a recently upgraded Eyelink2 eye-tracker; a psychoacoustics chamber; other well-equipped specialist labs for psychophysiological and experimental research; a dedicated observational suite; computing, video and audio recording and projection equipment for studio or field research; enhanced computing facilities for modelling and neuroimaging analysis; a basic wet lab with facilities for -80C DNA storage; a psychopharmacology lab for nicotine studies; and an extensive psychological test library.

All department facilities are available for use by any researcher with appropriate training/guidance and are serviced by a highly-skilled team of 5.8 departmental technicians with IT, electronics, and mechanical expertise; they have a 60m<sup>2</sup> workshop in which to build and test equipment. All full-time PhD students have generous dedicated space in shared offices, while part-time and PGT students have access to desk-space and computing facilities in a designated PG room and other open access facilities spread across our three buildings. All students are members of the Goldsmiths Graduate School (GS) and can access its computing resources; these have been increased since 2008.

We additionally have shared research infrastructure through collaborative links with other institutions including Bournemouth and Sussex, KCL, UCL, Trinity/Laban Conservatoire, and RADA. In addition, various institutions provide us with access to their facilities: fMRI via Birkbeck, Cambridge, Imperial, King's, and UCL; MEG via Hamburg's University Medical Centre and Kanazawa University; psychological test equipment via Educational Psychology at UCL; state of the art binaural auditory recording equipment via the Department of Music and Sound Recording, at Surrey; and samples of specific patient groups or clients with developmental disorders via links with Cambridge, various Institutes within UCL, King's London, St George's London, and the National Institute of Health, USA.

We have access to large datasets through collaborations with (i) the Dunedin Multidisciplinary Health and Development Birth Cohort Study; (ii) 3 studies at the Institute of Psychiatry (MRC Environmental Risk Longitudinal Twin Study, E-Risk); the Twins Early Development Study, TEDS); the G1219 twin study); (iii) the Edinburgh Birth Cohort Study; and (iv) the longitudinal MAGRIP study (Luxembourg).

We have received significant equipment donation, including a TMS machine and a £15K display monitor for field research in Namibia (Cambridge Research Systems). We also have arrangements with commercial organisations which provide funding that we channel into research-related activities in return for advisory services/input (e.g. Huntercombe Group, which runs a local neurorehabilitation facility; our Scientist-in-Residence scheme at the advertising agency adam&eveDDB; see e).

#### **e. Collaboration and contribution to the discipline or research base**

Our staff make contributions to the discipline/research base in diverse ways:

##### Conferences and seminars:

We hosted the BPS Developmental Section 2010 (**Bremner**); British Society for the Psychology of Individual Differences Annual Conference 2011 (**Pickering**); International Conference on Interdisciplinary Approaches to the Study of Individual Differences in Learning 2013 (run simultaneously at Goldsmiths and Tomsk State University; **Kovas**). **Banissy** obtained an ESRC Seminar Series Research Grant (*Social perception across the lifespan*, 2013-14), hosting seminars at Goldsmiths and UCL and running a related [website](#).

Staff have chaired, or been members of, the organising committees of national and international conferences held elsewhere, including: **Bremner**, *International Multisensory Research Forum*, Oxford, 2012; **Charlton**, *Aging and Cognition*, Dortmund, 2013; **Gabbert**, *International Investigative Interviewing Research Group (IIIRG)*, Dundee, 2011; **Gruzelier**, *Soc Applied Neuroscience*, 2008, 2011, 2013, and *FENS-IBRO Training School*, Geneva, 2013; **Hill**, *Developmental Coordination Disorder-IX*, Lausanne, 2011; **Kumashiro**, *Int'l Association of Relationship Research (2012-)*; **Stewart**, *Neurosciences and Music IV*, Edinburgh, 2011; **von Stumm**, *Int'l Soc for the Study of Individual Differences*, London, 2011 and *Behavior Genetics Association*, Edinburgh, 2012.

#### Professional body and learned society activities:

Committee memberships include: **Blumberg**, *Conflict Research Society*; **Bremner**, *BPS Developmental Psychology Section*; **Cooper** and **Pickering**, *British Society for the Psychology of Individual Differences*; **Gabbert**, *International Investigative Interviewing Research Group (IIIRG)*, and the *British False Memory Society*; **Gregory**, *British Association of Behavioural and Cognitive Psychotherapies*, 2009; **Rutland**, the *Society for Research in Child Development* (including its Committee on Equity and Justice in Childhood); **Smith**, *International Society for the Study of Behavioural Development*; **Stewart**, the School of Advanced Studies' *Institute for Music Research*.

#### Reviewing and Editorial Activity:

Many staff are members of the ESRC Peer Review College and also provide grant reviews for a host of other funding agencies, including: Academy of Finland programs; Action Medical Research; Australian Research Council; BBSRC; British Academy; EC funding bodies (e.g. Research Training Network; Marie-Curie Fellowships); EPSRC; Hong Kong IECRD; James McDonnell Foundation, USA; Leverhulme Trust; MRC; National Science Foundation, USA; Nuffield Foundation; NWO, Netherlands; NSERC, Canada; Research Foundation, Flanders; SKIDI-KIDS research programs, Helsinki; SSHRC, Canada; UEFISCDI, Romania; Wellcome Trust; plus the Austrian, Croatian, Dutch, Israeli, and Italian science research funding bodies.

We are editors, associate editors and editorial board members of numerous journals including: *Acta Psychologica*, *Addiction*, *Advances in Political Psychology*, *Applied Cognitive Psychology*, *Autism*, *BJ Developmental Psychology*, *BJ Psychology*, *BJ Visual Impairment*, *Cahiers Internationaux de Psychologie Sociale*, *Child Development*, *Contemporary Hypnosis and Integrative Therapy*, *E J Social Psychology*, *European Psychologist*, *Frontiers in Cognitive Science*, *J Child Psychology and Psychiatry*, *J Neuropsychology*, *J Neurotherapy*, *J Social Issues*, *Musicae Scientiae*, *Peace and Conflict*, *PLoS One*, *Psychology of Consciousness*, *Psychomusicology*.

**Banissy** and **French** co-edited separate 2013 *Frontiers in Psychology* research topics on synaesthesia (*Cognitive Science*) and belief in conspiracies (*Personality Science and Individual Differences*). **Moore** and **Stewart** each launched further *Frontiers* research topics (on *Sense of agency* and *Music disorders*, respectively) for publication in 2014. **Smith** guest-edited special issues of *Emotional and Behavioural Difficulties* (2012) on the effects of bullying and cyberbullying, and *Zeitschrift für Psychologie* (2009) on cyberbullying in adolescents.

#### Provision of Other Expert Advice

**Banissy** was Scientific Adviser on a Wellcome Trust Arts Award, *Empathy*, awarded to Daria Martin (Oxford). He has provided training to other researchers in the use of non-invasive brain stimulation leading to publications (with colleagues at Birkbeck, in *Current Biology*) and grant applications (e.g. the MRC-CBU, in support of an MRC Centenary Award). He has played a leading role in training researchers at International Summer Schools in Cognitive Neuroscience Methods (eg Max Planck Institute for Human Cognitive Brain Sciences International Summer School; Magstim Neuroscience Conference and Workshop, Oxford). **Gabbert** and **Valentine** are 'recognised experts of international standing' in the Australian Research Council College of Experts. **Jones** is a Research Advisor to the Educational Psychology doctorate course at UCL, providing feedback on research and theses (2010-13). **Rutland** served on the ESRC's Training and Development Board/Training and Skills Committee (2008-12) and Seminars Competition Selection Panel (2007-09).

#### Development of psychological tests and related resources

These are typically in the public domain (hyperlinks underlined below), and are being widely adopted

nationally and internationally. For example:

- **Bond, Guenole, and Lloyd** developed a psychometric instrument measuring psychological flexibility called the Acceptance and Action Questionnaire (AAQ-II), and a workplace-centred version (WAAQ). This has been widely adopted by clinical, health and occupational psychology researchers.
- **Cocchini** and collaborators developed two diagnostic neuropsychological assessments, the Visual Analogue tests for Anosognosia for Motor / Language Impairments; translated into Italian, French, German and Malay, they are freely [available](#) and used in labs in Europe, Australia and Asia. **Gregory** has adapted the adult Dysfunctional Beliefs About Sleep (DBAS) Scale and the Pre-Sleep Arousal Scale (PSAS) for use with children and adolescents.
- **Müllensiefen** developed the 'Goldsmiths Musical Sophistication Index', a test battery assessing musical skills and expertise. This was a collaboration with the 2011 BBC Lab UK *How Musical Are You?* project, involving >190,000 participants. All materials are [freely available](#). He also developed the FANTASTIC software package ([free and open source](#)) for the computational analysis of melodies. He maintains one of the largest MIDI corpora of popular music in the world, acquired as part of a large [EPSRC](#) project; with >14,000 fully transcribed songs this unique resource is used by international researchers modelling statistical learning and implicit knowledge of musical structure.
- **Powell** has developed two neurorehabilitation instruments used worldwide and free to download (*see impact case study*): the Brain Injury Community Rehabilitation Outcome scales ([BICRO](#)) and the Quality of Life after Brain Injury ([QOLIBRI](#)), a multi-authored multiple language instrument. The Department hosted a one-day symposium to train clinicians and researchers in the use of the QOLIBRI (June 2013), sponsored by leading law firm LeighDay.

#### External Academic Collaborations

Alongside our departmental ethos of internal collaboration, our staff are engaged in multiple external collaborations, often internationally. Space precludes listing them all here but in this REF period we have published and/or held grants with colleagues in over 60 UK universities and more than 120 others internationally, across 30 countries. These include more than half the top 50 universities in the 2013 QS world university rankings. From this very extensive list, we note just a few examples below:

**Banissy** is part of a Leverhulme Trust International Network Partnership Grant with artists based at the Universities of Oxford and Amsterdam, plus the Simon Fraser University (Canada). Internationally, he has published with Duchaine at Dartmouth College (part-funded by a BA small grant), and the National Central University, Taiwan (with research visits funded by the Taiwanese National Science Council). **Bhattacharya** has published findings with colleagues at IIT (India), supported by a prestigious CP-STIO award from the Indian government. **Bremner** recently published an OUP volume on Multisensory Development with an international editorship (Bremner, Spence [Oxford], and Lewkowicz [Florida Atlantic University]). **Davidoff** et al's ESRC Himba grant noted earlier was advised by Goodale (U. Western Ontario). **Cooper** was co-I on an Australian RC grant on gambling (AU\$150K; 2008-10). **De Fockert's** colleague Pacheco-Unguetti was funded by a University of Granada postdoctoral fellowship to spend 6 months working with him at Goldsmiths from Sept 2011. **Müllensiefen's** collaborator (Halpern: Bucknell, USA) was awarded a 1-year Professorial Fellowship from Leverhulme to work with the Goldsmiths Music Mind and Brain lab (2012-13); he is also collaborating with colleagues from Computing at Goldsmiths, Lancaster, Queen Mary and Utrecht, and from Music at Oxford, on a recently awarded £2M AHRC grant (*Transforming Musicology*) which will commence later this year. **Rutland's** long term international collaboration with Killen (University of Maryland) has led to co-authored journal articles and books, and he has acted as an international consultant on her National Science Foundation grants. **Smith, Jones and Rutland** are part of an ESRC-funded European-Indian networking group (PI: **Smith**; 2012-5) which provides opportunities to build links with international colleagues, run workshops, and several prepare publications. **Stewart** is a collaborator on a \$2.5M Canadian SSHRC network grant (*Advanced Interdisciplinary Research In Singing*; 2009-15) which has enabled PGs to make research visits to Canada and pursue research projects within our Music, Mind and Brain lab.

#### Collaboration with external non-academic partners

Our impact case studies, describing work by **Freeman, Powell, Smith, and Valentine**, showcase

some ways in which we are actively engaged in research directly involving, or relevant to, external bodies. In addition, **Gabbert** is currently working with the Association of Chief Police Officers and two charities in an effort to change policy around obtaining eyewitness evidence. She also works with Greater Manchester Police as a specialist researcher engaged with victim, witness and suspect processing in major investigations. In this role she observes investigative interview procedures and provides expert advice on these processes. **Guenole** has worked closely on commercial test development with IBM. **Jones'** work on school behaviour led to her being invited onto the Steering Committee of a Labour Party commission to examine youth unemployment and the skills gap between school and work (2011-); since 2013 she has been working with Lewisham Council's Early Years and Early Intervention services to offer evaluation of their intervention programmes targeting social and emotional development. **Linnell** was co-I on an NIHR grant (£240k; 2010-13) investigating neurofeedback to improve function after stroke with Kings, London and East Kent Hospitals NHS Trust. **Moore** has been accepted onto the Royal Society scheme pairing MPs with scientists. **Pring** contributed to Tate Modern's teaching programme *Widening Horizons*. **Stewart** is involved in therapeutic projects with Imperial, examining the role of sound and music in promoting movement in clinical groups (e.g. premature infants, stroke patients). The **APRU** (see a above) has a Wellcome-funded artist-in-residence (Alisdair Hopwood).

Several innovative externally-facing activities are especially noteworthy:

- In 2005 Goldsmiths established a partnership with the [Huntercombe Group](#), a leading specialist healthcare private provider; **Cocchini** acts as Goldsmiths research liaison with two of their London-based NeuroRehabilitation Centres (Blackheath and Roehampton), and they provide financial sponsorship (c. £20K p.a.) The partnership has facilitated our neuropsychological research as manifest in joint supervision of MSc projects every year, presentations to national/international conferences, several journal articles, and collaborative clinical events and conferences (e.g. *The Challenge for Complex Neurorehabilitation for 2010 and beyond*; Goldsmiths 2009).
- **Freeman** holds a 0.25 fte academic appointment alongside his directorship of *i2media research*, a spin-out company based in Psychology which specialises in consumer research [commissioned](#) by high profile private and public sector organisations. Through these activities he has become a member of the scientific advisory bodies of various companies (e.g. GSK), steering groups of EU Commission Directorates (e.g. Networked Electronic Media), and UK/European expert groups (e.g. UK Council for Child Internet Safety). Psychology has strongly supported *i2media* by providing it with office space and a base for their related EU-funded academic projects; grant overheads are split between *i2media* and the department, and the company provides applied research opportunities for PGs. Using the expertise of *i2media*, we recently launched "Project Shop", an initiative in which we advertise (and are attempting to crowd-source funding for) selected research projects to the wider research community, using social media.
- Since 2010, **Müllensiefen** has been [Scientist in Residence](#) with the London advertising agency [adam&eveDDB](#). This innovative departmental mechanism, funded by the agency, promotes scientifically rigorous research into the psychology of advertising. Our staff jointly supervise MSc projects with *adam&eveDDB* strategy planners, and conduct special research projects for its clients. Research output has been published and presented at both academic and industry conferences, influencing practices not only at *adam&eveDDB*, but also within the UK's advertising sector.

#### Prestigious awards, prizes and fellowships

**Banissy** held a British Academy Postdoctoral Fellowship (PDF; £250k, 2010-3); he was previously an ESRC PDF holder, as were **Jones**, **von Stumm** and **Williamson**. **Bremner** won the Margaret Donaldson Early Career Prize for research and contribution to developmental psychology. **French** is a Distinguished Supporter of the British Humanist Association and Fellow of the Committee for Skeptical Investigation. **Gabbert** won the 2011 iIRG Academic Excellence Award. **Gregory** held a Leverhulme Fellowship (2008-11). **Kovas** received two major researcher prizes (Wiley/BA Prize, 2013; APS Janet Taylor Spence Award, 2013). The ISSID Young Investigator Award 2013 was won by **von Stumm** (the third time this award has been won Goldsmiths Psychology staff; she also won the BPS PsyPag Rising Researcher award 2010 for outstanding PhD research. **Bhattacharya** and **Gruzelier** became Fellows of the Royal Societies of Medicine and Arts respectively.