

<p><b>Institution:</b> University of Greenwich</p> <p><b>Unit of Assessment:</b> (UoA 4 - Psychology, Psychiatry and Neuroscience)</p> <p><b>a. Overview</b></p> <p>This submission to the UoA4 Psychology, Psychiatry and Neuroscience panel is from the Applied Psychology Research Group (<b>APRG</b>) in the Faculty of Education and Health, University Greenwich (<a href="http://www2.gre.ac.uk/about/schools/health/research/psycoun/aprg">http://www2.gre.ac.uk/about/schools/health/research/psycoun/aprg</a>).</p> <p>The University of Greenwich is a research-informed institution which aims to build on its success by increasing quality, volume and intensity of research activity by:</p> <ul style="list-style-type: none"> <li>• ensuring it has a critical mass of excellent researchers through appointment and retention of research active staff</li> <li>• supporting the development of at least 20 research groups with an international reputation</li> <li>• developing a vibrant community of high quality postgraduate research students</li> <li>• increasing the national and international impact of its research</li> </ul> <p><b>APRG</b> strategy is informed by these objectives. Following targeted recruitment the number of members of the <b>APRG</b> with international publications has more than doubled from four (category A) in 2008 to 10 in 2013; 15 out of 19 psychology staff in the department are publishing at national level and the number of international outputs has increased by 70% since 2008.</p> <ol style="list-style-type: none"> <li>1. The <b>APRG</b> and the Research Centre for Children Schools and Families (<a href="http://www.gre.ac.uk/schools/health/research/CSF">www.gre.ac.uk/schools/health/research/CSF</a>) which is located in the <b>APRG</b> have reputations as centres of excellence in research and its application</li> <li>2. Psychology research students have increased from four in 2008 to 14 in 2013</li> <li>3. Examples of the impact of psychology research include: <b>Josh Davis</b> on police eye witness identification of criminal suspects; <b>Pam Maras</b> on students' behaviour and policy and practice in education (see REF3b case studies). Other examples include <b>Damian Poulter's</b> work on driver behaviour, <b>Paul Ward's</b> work on expertise including with the Police Federation and <b>Stella Tsermentsili's</b> work on neuro-psychological factors underpinning Parkinson's and other neurological disorders (see <a href="http://www2.gre.ac.uk/about/schools/health/research/psycoun/aprg/experts">http://www2.gre.ac.uk/about/schools/health/research/psycoun/aprg/experts</a>)</li> </ol> <p>The <b>APRG</b> focuses on the application of research in education, health, law, sports and human behaviour in environmental and other contexts. It has a long history of engagement with the local, regional and international communities. Our location has allowed us to exploit our position in the Thames Gateway with a foot in Kent and Southeast London and close links to Northern France via rail-links. We also have good links to faculties of architecture, computing and humanities, business, science and engineering which supports interdisciplinary research, including cognitive and developmental psychology, electrophysiology, individual differences, neuropsychology, perception, social psychology and social cognition. (<a href="http://www2.gre.ac.uk/about/schools/health/research/psycoun/aprg/researchprojects">http://www2.gre.ac.uk/about/schools/health/research/psycoun/aprg/researchprojects</a>)</p> <p>The Research Centre for Children Schools and Families is linked to the <b>APRG</b> and is a centre of excellence for research in applied psychology in education, health, and social issues in families, adolescence and childhood. The Centre, lead by <b>Pam Maras</b> was set up in 2009 as part of the University of Greenwich's strategic investment in research centres of excellence and provides research and consultancy with public and private sectors.</p> <p>Members of the Centre have experience of a range of methods from random control trials and neuro-imaging (<b>Stella Tsermentseli</b>), to large surveys and experimental, field and laboratory studies (e.g. <b>Sajid Humayon; Pam Maras; Claire Monks; Anthony Pellegrini; Damian Poulter; Oliver Robinson; Ian Tharp; Trevor Thompson</b>). The Centre also draws on expertise across the</p>
---

## Environment template (REF5)

University including funded projects with the Faculties of Architecture, Computing and Humanities (on environmental behaviour) and Business (on the economics of interventions with disaffected youth). The Centre has well-established research links across the UK (e.g. **Josh Davis**' work with police), Europe (e.g. **Claire Monk's** work on bullying in Spain) and worldwide (including the US, Latin America, Australia and China, e.g. **Pam Maras; Anthony Pellegrini; Paul Ward**).

**b. Research strategy**

University of Greenwich's research agenda is led by the Deputy Vice Chancellor, Research and Enterprise, who chairs the University Research and Enterprise Committee which sets research strategy, oversees research student matters and is informed by the University Research Ethics Committee. All faculties are represented on the committee, thus research groups, including the **APRG**, are considered at the institutional level. The University Strategic Plan for 2012–17 contains ambitious plans to develop the research and enterprise agenda with the vision of:

- Enhancing our capability as a research-informed and enterprising institution which produces international quality research and knowledge exchange ([http://www.gre.ac.uk/statagicplan](http://www.gre.ac.uk/statategicplan))

Research targets are reviewed annually with action plans as part of the planning cycle. The overarching strategic aim for the APRG is to:

- Promote and support excellence in basic, applied and interdisciplinary research in psychology and its application and to build staff capacity to produce internationally excellent research

We have met and exceeded our objectives by:

- Focusing on one main research group (the **APRG**) and supporting the Research Centre for Children Schools and Families as a centre of excellence within the group (see 'People' and 'Income, infrastructure and facilities' below)
- Ensuring that research facilities including labs and equipment are current and meet the needs of research staff and students (see 'Income, infrastructure and facilities')
- Recruiting, retaining and supporting talented staff especially those in the early stages of their research careers (see 'People' below)
- Providing all research active staff with the opportunity to supervise research students in a challenging and supportive environment (see 'People' and 'Income and infrastructure')
- Increasing external research income by focusing on funding from a range of sources (see 'Income, infrastructure and facilities')
- Engaging with internal and external colleagues, users and funders to increase the profile, understanding and applicability of psychology (see 'Collaboration and contribution to the discipline or research base' below)
- Targeting staff development, particularly in respect of early career staff supported at local and institutional level (through engagement and reward via the Greenwich Early Career Programme, see 'People' and 'Income, infrastructure and facilities')

The strategic focus on one research group – the **APRG** – allows for a level of collegiality and collaboration that would not have been possible in smaller groups; importantly though, it has also increased opportunities for joint work across the department (e.g. the EU-funded CROIS project on youth at risk in the UK and France which includes, among others, **Monks** and **Maras**).

The **APRG** will continue to improve, using effective systems to achieve its goals and consolidate its high quality research. Evidence of improvements includes the number and quality of research outputs, the increase in research students and number of staff obtaining external funding.

The implementation of the research strategy is supported by two central university departments

(Greenwich Research and Enterprise and Human Relations), which work with faculties and research groups to provide targeted support. The findings from Vitae and its Careers in Research Online survey, as well as from the Principal Investigators and Research Leaders survey (PIRLS) also inform the strategic direction that the University has adopted and the **APRG** follows. Further evidence of the achievements and strategic plan of the **APRG** can be found below.

### c. People, including:

#### i. Staffing strategy and staff development

Staff and students are essential to the success of the **APRG**.

Following a significant change of more than 60% in the psychology staff base five years ago, **APRG's** strategy has been to replace staff that have left the university by recruiting, retaining and supporting staff (especially early career researchers with potential for research excellence) through the targeted recruitment of:

- international scholars (e.g. **Anthony Pellegrini; Paul Ward**)
- talented mid-career researchers (e.g. **Damian Poulter; Sofia Stathi**)
- early career researchers (e.g. **Sajid Humayun; Ian Tharp; Stella Tsermentseli**)

Research needs are assessed and reviewed annually through appraisal and targets are built into a balanced academic workload model. Psychology staff have had nearly 250 days of staff research development (including conference attendance – funding for which was in the region of £20,000) since 2008. The University also has a sabbatical programme (<http://www2.gre.ac.uk/about/policy>).

In line with its strategy to support research across all levels from PGRs to senior researchers, the University of Greenwich has made significant progress in addressing and embedding the principles and clauses of the Concordat, as evidenced by its Compliance, Gap Analysis and Action Plan (<http://www.gre.ac.uk/hr/concordat>) and the development of a researcher development programme to support the career development of researchers and maximise the potential of all staff. It began with the University of Greenwich Early Career Researcher Programme in 2009 ([www.gre.ac.uk/ecr](http://www.gre.ac.uk/ecr)) and is now being rolled out across the researcher's career span. A mentoring programme is in place for all ECRs. University of Greenwich is involved in piloting the Vitae Researcher Development Planner as its own Researcher Development Programme.

Staff development is provided locally by the Faculty and centrally by the departments of Human Relations and Greenwich Research and Enterprise. It is delivered in a number of ways including mentoring and workshops on topics including: intellectual copyright, identifying partners, writing research proposals, costing and pricing, impact, planning research, project management, managing budgets and media training. Information about training can be found at <http://www.gre.ac.uk/research/development> and <http://www.gre.ac.uk/research/training-and-development>. Quality of training is evaluated through feedback at the time and after events.

#### **Greenwich early career researcher programme**

The Greenwich early career researcher programme was set up in 2009 as a direct response to the intentions of the Concordat and in accord with the aims of the previous Roberts report and funding; this was a scheme run by HEFCE to support research students in HE, which is no longer in place. In order to allow a maximum number of staff to benefit the programme aims to be inclusive. Early career research staff are automatically entered into the programme on joining the University ([www.gre.ac.uk/ecr](http://www.gre.ac.uk/ecr)), which supports their career development. It fosters a sense of community, provides targeted and responsive support and annual University awards for excellence in research and communication. The programme includes a networking forum and is accessed via the University portal. A steering group oversees strategy; support is provided centrally and locally overseen by faculty ECR champions and ECR views are obtained by a survey every two years.

Eight **APRG** staff have engaged with the ECR programme since 2008, and four have won university prizes for research excellence and communication in each of the last four years (**Josh Davis; Oliver Robinson; Sofia Stathi; Stella Tsermentsili**).

Contract research staff receive the same support and have the same access to staff development as permanent staff. The University seeks to employ staff on permanent contracts where feasible and to actively support career progression (e.g. a permanent research fellow post in the Research Centre for Children Schools and Families has been underwritten by the faculty since 2007).

Equality and diversity is embedded in recruitment processes and line managers are trained in current practice. They are responsible for ensuring compliance and are encouraged to be proactive in identifying any areas of contention. All staff have the opportunity at appraisal and throughout the year to raise issues with line managers and are ensured confidentially through the human resource department. News about staffing and appointments is passed on to staff on career breaks including maternity/paternity leave and to those absent because of special circumstances.

## ii. Research students

Increasing the number of psychology research students and providing them with a challenging and stimulating environment are priorities for **APRG**; along with offering all research active staff the opportunity to supervise students. To this end, 13 research students are currently attached to the psychology department and a further two are engaged on interdisciplinary projects in nursing and science (supervised by **Trevor Thompson**). Each member of the **APRG** supervises at least one research student (see <http://www2.gre.ac.uk/about/schools/health/research/psycoun/aprg/experts> for a list of our research students and their areas of interest).

The University has a commitment to increasing the number of research students at Greenwich and in 2012 instigated a bursary scheme funded at research council levels. This is the Vice Chancellor's Scholarship Scheme. The **APRG** has won three Vice Chancellor scholarships in the last two years (supervised by **Claire Monks; Sofia Stathi; Ian Tharp**).

We are working to increase psychology research student numbers by submitting further applications to the Vice Chancellor's Scholarship Scheme and external funding bodies (such as the National Institute for Health Research) and exploiting our external links to secure research funds for PGRs.

The University of Greenwich has established procedures for registering and monitoring research degree programmes, including supervision, transfer, examination and infrastructure. This is overseen by a Faculty Research Degrees Committee which also has responsibility for quality assurance. The University is committed to ensuring PGRs can voice their views; this is achieved via faculty level meetings and engagement with the HEA Postgraduate Research Experience Survey (PRES), in response to which the faculty prepares an action plan.

Psychology PGRs are located within the same building as the **APRG** and a psychology postgraduate tutor oversees their progress and offers pastoral support. The PGRs also have access to the larger University population of postgraduates and are encouraged to engage with the University Research Student Association. This provides a supportive environment where research students from a range of disciplines can meet and collaborate. Students are provided with office space and may apply for staff development to undertake courses and attend conferences; they meet with their supervisors on a regular basis and are also encouraged to share their ideas and progress through the research seminars and meetings.

Training is provided using specialist programmes and a dedicated statistics tutor provides training in advanced statistics and methods. All new students undertake a key skills assessment. PGRs attend University-wide research ethics and the online training programme EPIGEUM and, if teaching, undertake a dedicated training course, the successful completion of which confers eligibility for associate fellowship of the Higher Education Academy. The University is also

developing training for PGRs, ECRs and others on research integrity which will be delivered via EPIGEUM. This university training supplements a Faculty core training programme with advanced training being provided at the Department level.

In addition, the University is a founder member of the New London Graduate School (NLGS) consortium of the Universities of Anglia Ruskin, East London, London South Bank and Middlesex which obtained an Arts and Humanities Research Council (AHRC) capacity building block grant partnership award in 2011. NLGS offers training to PGRs across the consortium, including psychology. An NLGS application to the ESRC for a Doctoral Training Unit (including psychology) was deemed 'accreditable' by the ESRC but subsequently funding was withdrawn by the ESRC in 2011 following comprehensive spending review cuts.

#### d. Income, infrastructure and facilities

##### Income

The **APRG** has seen a significant growth of over 30% in external research income over the census period – from approximately £500,000 to almost £900,000. £369,772 of this expended at Greenwich is included in this submission (approximately £250,000 will also be expended this year). The bulk of this income relates to projects in the Research Centre for Children Schools and Families, reflecting our applied focus. Funding comes from a range of sources including the EU, research councils, charities, local and national government and NGOs. Examples include:

- **EU** award (£601,900) cross regional project between France and the UK on disaffection and behaviour in French and English students (**Pam Maras**)
- **Technology Strategy Board** Knowledge Transfer Partnership (£38,000) working with a Charity (Communities Empowerment Network) on applying knowledge from work in the University on children's behaviour to the work of special educational needs organisations (**Pam Maras**)
- **ESRC** award (£144,405) modelling the development of crash liability and risky driving behaviour in novice drivers (**Damian Poulter**)
- **British Academy** (£9,315) award on adult development in Iran and the UK to one of our recent ECRs (**Oliver Robinson**), providing evidence for the Department strategy to appoint and nurture talented ECR staff

The University has a strategic research fund; members of the **APRG** have received £400,563 in QR related funds and £49,527 in HEIF funds (including a recent award of £25,177.06) from the university since 2008 which has allowed us to support the growth of existing research and development of new research and to leverage opportunities for external funding and partnerships <http://www2.gre.ac.uk/about/schools/health/research/psycoun/aprg/our-partners>.

##### Support infrastructure

University of Greenwich practical advice and support for research includes:

- Central support including support in identifying and applying for funding, costing, and access to university funds. Staff also receive central support for writing and applying for research funds through the Peer Review College. All research outputs are placed in the University of Greenwich Academic Literature Archive (GALA), an open repository (<http://gala.gre.ac.uk/>). The number of outputs from the **APRG** is increasing by 40% annually
- Faculty full-time business development manager, who provides advice and practical support on bid development and funding
- Department support through formal mentoring, peer support, reviews, department Research Ethics Committee and regular department research meetings for staff and PGRs including a seminar programme for junior members of staff. An annual psychology public lecture takes place; recent lecturers have included Stephen Reicher (St Andrews), David Clark (Oxford), Annette Karmiloff-Smith (Birkbeck) and Lorraine

Tyler (Cambridge)

### Equipment/lab infrastructure

In line with its commitment to developing psychology as a scientific discipline, the University of Greenwich has continued to invest infrastructure, including a major programme for upgrading the laboratory facilities in 2011, including a £200,000 spend on related equipment including:

- Eye tracking, dedicated laboratory space equipped with a freezer equipped for studies involving the handling of water or the storage of immunological measures (e.g. salivary cortisol) and additional individual research cubicles
- Psychophysiological lab for recording EEG and other psychophysiological measures such as heart rate, skin conductance and temperature

Associated equipment and tests were also purchased; needs for research equipment are assessed annually. Support is provided by two dedicated psychology technicians and other university staff.

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

#### Collaboration

A significant proportion of research in psychology at Greenwich is collaborative and much of it is interdisciplinary, carried out in partnership with external parties in line with the main aim of the **APRG** to: promote and support excellence in basic, applied and interdisciplinary research in psychology and its application, examples include:

- Work with the police by **Josh Davis**, referred to above and in sections REF 3a and 3b on police eyewitness has been disseminated widely at invited workshops, meetings and training courses attended by policy makers, practitioners, police officers and lawyers (e.g., Association of Chief Police Constables, Home Office, the Ministry of Defence, the Crown Prosecution Service (CPS), the National Police Improvement Agency (now The College of Policing)
- **Paul Ward** also has links with police and law enforcement services including the Defence Science & Technology Laboratory (DSTL, An Executive Agency of the Ministry of Defence) and in the US the Training Innovation Division, Federal Law Enforcement Training Center. **Paul Ward's** research also informed consultancy on perceptive-cognitive skills for the United States Olympic Committee and the USA Shooting Team
- Work by **Pam Maras** on sustainability, referred to above, on an EPSRC project with The Faculty of Architecture, Computing and Humanities was part funded by the energy company EoN and an EU funded project with Faculty of Science and Engineering is in partnership with Medway Council. **Pam Maras'** work on behaviour and aspirations (see case study REF 3b) has all been carried out in partnership with internal and external bodies including: the Community Empowerment Network (CEN) and the UK Youth Avon Tyrrell Ecohealth Project funded by UK Youth (with **Carl Parsons** who is included in the University of Greenwich REF submission under Education), the Royal Borough of Greenwich Behaviour Support Service and Greenwich Mencap
- Research on sport and performance in collaboration with Charlton Athletic Football Club Community Trust (**Damian Poulter; Ian Tharp; Trevor Thompson; Paul Ward**)
- **Claire Monks** long term collaborations with colleagues in Spain and Latin America on bullying
- **Oliver Robinson's** work with colleagues in Texas on adult development
- **Sofia Stathi's** work on prejudice-reduction in schools with Racial Equality Sandwell, West Midlands and on prejudice with Richard Crisp (Sheffield), Loris Vezzali (Modena, Italy) and Dora Capozza (Padova, Italy) which has informed interventions in Italian schools
- **Damian Poulter's** research programme (including an ESRC funded grant) is aimed at informing the development of policy and practice designed to modify identified risk factors

**Environment template (REF5)**

in novice drivers, collaborators include the Transport Research Laboratory

In addition to these individual examples, the Research Centre for Children Schools and Families research includes funded projects with partners in national and international organisations. For final reports see: <http://www2.gre.ac.uk/about/schools/health/research/healthsocial/ccsf/project>. External partners may become associate members of the Centre via the virtual Learning Evaluation and Research Network ([LERN@gre.ac.uk](mailto:LERN@gre.ac.uk)). There is also linked research-based training, including on children with behavioural difficulties (see also REF 3b case study **Maras**).

**Contribution to the discipline and research base**

**APRG** research is well represented in high profile science publications, and well known through international links; international capacity building and media links. For example:

- Publications in Nature **Anthony Pellegrini** and Nature online **Paul Ward**
- International work on child development including on play and aggression including implications for the way that policymakers and practitioners look at children's social behaviour in school (**Anthony Pellegrini**).
- Research on split-second decision making under stress including pioneering work within elite sports, as well as senior professionals who make decisions in high-pressure situations, such as soldiers, police officers and surgeons (**Paul Ward**).
- International capacity building initiatives led by **Pam Maras** in her role on the International Union of Psychological Science <http://www.iupsys.net/> have resulted in declarations for the development of regional psychology associations in the Caribbean and Africa.
- The **APRG** also has a strong record of media coverage including: **Josh Davis** on police eyewitness identification; a recent interview with **Oliver Robinson** in New Scientist on his work on adult development; **Ian Tharp** on anxiety and personality; and **Paul Ward** on his research on cognitive systems and skilled performance (<http://www2.gre.ac.uk/about/schools/health/research/psycoun/aprg/news-and-events>).

Further evidence on the **APRG** contribution to the discipline and research base can be found in sections REF2 (output) and REF3a and REF3b (impact) as well as the research group website <http://www2.gre.ac.uk/about/schools/health/research/psycoun/aprg>.