

Institution: University of Kent

Unit of Assessment: Anthropology and Development Studies (UoA 24)

a. Overview

The School of Anthropology and Conservation (SAC) at Kent is distinctive, in its scope of enquiry and in its genuinely interdisciplinary environment. Our primary research focus is the study of humans and their relationships with the non-human world. We approach this task from 3 complementary angles. First, humans not only interact with the world, but are constituted as human through the process of inhabiting it. Second, we locate humans as inhering in the world, from a cognitive, evolutionary, and ecological viewpoint. Third, our environment is profoundly shaped by human activity, presenting challenges to sustainability that must be thoroughly understood if they are to be addressed. We combine social and natural sciences via 4 disciplinary groupings: (a) Socio-Cultural Anthropology, (b) Biological Anthropology, (c) Conservation Social Science, and (d) Conservation Biology. Each group has an academic head (Theodossopoulos, Newton-Fisher, Duffy and Davies respectively). The specific remit of these heads is to build research culture by providing intellectual leadership, encouraging colleagues to make major contributions to their respective fields.

Since RAE2008, we have strengthened our research base, increasing numbers of category A staff, and have expanded biological anthropology significantly (6 additional posts). As a result we are one of the few institutions in the UK that combines social and biological anthropology in a substantive manner. In addition, the international reputation of the Durrell Institute of Conservation and Ecology (DICE) as a centre of expertise has further grown since its foundation in 1989. Research strength has been consolidated via strategic appointments across all intellectual areas of SAC (at Reader/Professorial level: **Theodossopoulos, Pina-Cabral** and **Duffy**; at Lecturer/Senior Lecturer level: **Hodges, Henig, Bovensiepen, Mahoney, Lycett, von Cramon-Taubadel, Davies, Roberts, Struebig, Humle, Tzanopoulos, Kivell** and **Burger**; and at postdoctoral level: **St John** and **Eren**). We have maintained levels of research income, augmented PGR numbers and invested in physical infrastructure and research capacity (detailed below). Category A staff delivered 577 publications (comprised of 5 monographs, 22 edited collections, 436 journal articles and 114 book chapters) as well as 320 conference papers (figures accurate as of July 2013).

b. Research strategy

Our research strategy focuses on promotion and development of areas where we have a claim to uniqueness and strength – notably a growing international reputation for biological anthropology, consolidating and developing our international reputation for research on conservation, as well as supporting leading edge research in socio-cultural anthropology (including environmental anthropology). Our mission is to ensure that we engage in world leading interdisciplinary research while remaining anchored to our core disciplines. This also allows us to be highly flexible: via key nodal 'points of contact' throughout SAC, we are able to assemble and reconfigure interdisciplinary research teams in tactical and strategic ways. The value of this is that we succeed in (i) establishing world leading research agendas (for example the relationship between ethnobiology and the epistemology of anthropological research, in studies of personal naming, and in the expansion and management of protected areas), and (ii) responding to emerging trends (for example, the effects of the financial crisis in Europe, and studies of conflict and territorial demarcation.

RESEARCH STRUCTURE

SAC provides a framework to draw together the 4 disciplinary groupings. Each provides a core focus for activities and interactions between staff, PGRs, and affiliated researchers. We have 3 research centres: the Centre for Biocultural Diversity (CBCD), linked to Groups (a) and (c); Kent Osteological Research and Analysis (KORA), linked to Group (b); and the Centre for Social Anthropology and Computing (CSAC) which links to all groupings. We also have the Durrell Institute of Conservation and Ecology (DICE), a larger integrating centre dedicated to research and training on biodiversity conservation and ecosystems. DICE encourages and supports interdisciplinary research, particularly between Groups (c) and (d) and is the focus of our impact strategy. In RAE2008 the School made two separate submissions, one to the Anthropology Panel



and the other to Earth Systems and Environmental Sciences. Following RAE2008 it was decided to develop SAC as a more integrated whole, working towards a single submission to UoA 24 for REF2014. As a result, research activities in SAC have been re-organised and certain groupings have been deliberately expanded and strengthened, to reflect this changing character. Below we set out our research structure and how the different sub-groups are integrated. Numbers in square brackets denote outputs listed in REF2.

a) Socio-cultural Anthropology

The socio-cultural anthropology group is concerned with understanding humans and their relationships with the world. The group is at the forefront of contemporary debates in identity, social and economic crises, personhood, personal mobility, landscape, environmental and medical anthropology and ethnobiology. **Pina-Cabral** [1,4], **Ellen** [1], **Bowman** [4], **Fischer** [4] and **Hodges** [1] have made significant meta-theoretical and epistemological contributions that cut across sub-fields. This grouping has developed expertise in identity and conflict (**Bowman** [1,2,3], **Bovensiepen** [1,2], **Henig** [1,2,3], **Theodossopoulos** [1,2,3,4]), for example: **Bowman** on intercommunal interactions in regions of ethno-religious conflict, and **Theodossopoulos** on resistance and discontent, including the crisis in Greece. The group also examines worlds in transformation (**Pina-Cabral**, **Ellen**, **Hodges** [2,3,4]), for example: **Pina-Cabral** on kinship, naming practices, and the state in Brazil [2], and **Ellen** on frequency, periodicity and ritual reproduction [4]. Work on environmental anthropology and ethnobiology is organised through the CBCD, which forms a key connecting node via **Ellen** [2,3], **Alexiades** [1], and **Fischer** between Groups (a), (c) and (d), with members from all 3 groups.

b) Biological Anthropology

Biological Anthropology at Kent undertakes leading edge research linked by a common evolutionary paradigm; it has particular strengths in osteology and functional morphology of human and non-human primates, primate behaviour and ecology, evolutionary approaches to investigating human behaviour, and multidisciplinary approaches to understanding cultural evolution. The group is linked to KORA. Von Cramon-Taubadel generates insights into the micro-evolutionary history of human and primate cranial and mandibular anatomy [1,2,3,4]. Mahoney works on evolution of tooth enamel and function, and cell biology of human deciduous teeth [1,2,3,4]. Kivell studies the morphology of living and fossil non-human primates [1,2,3,4]. Lycett's combination of phylogenetic and morphometric methods has produced significant advances in the study of material-culture variation [1,2,3,4]. Humle brings expertise on tool use and cultural variation in wild chimpanzees [1,2,3,4]. **Newton-Fisher** investigates socio-ecological functions of wild chimpanzee behaviour, testing biological markets models, and challenging work on mating strategies [1,2,3,4]. Johns studies adolescent pregnancy from an evolutionary perspective [1,2,3]. Burger works on evolutionary ecology and demography [1,2,3,4]. Eren studies the efficiency, design and learning characteristics of Neanderthal technologies [1,2,3]. This group will be significantly strengthened and supported during the next REF period via the recent ERC award of Euro 1.62 million to Kivell for research on 'GRASP, The evolution of the human hand: grasping trees and tools', 2014-2019.

c) Conservation Social Science

This group is highly interdisciplinary, drawing on perspectives from across the social sciences, including politics, economics and development studies. It draws together the respective specialisms of its members to develop novel perspectives and new methodologies, challenge disciplinary perspectives and envision alternative ways of framing complex conservation problems. This allows for a creative fusion of theoretical perspectives on conservation as a field of enquiry, as well as the scope to examine, reflect on and change practice in conservation. The group has particular specialisms in human-wildlife interactions (Humle [4], MacMillan [1], St John [2]), global regulation (Duffy [4]), integration of socio-economic considerations in landscape scale ecology (Tzanopoulos [1,2,3,4]), and tourism, recreation and conservation (MacMillan [2,4], Duffy [3]). For example, MacMillan uses approaches to conservation planning that include novel economic methods to explore investment opportunities for biodiversity businesses [3]. Duffy's work draws on international politics, geography and sociology to investigate the roles of international NGOs and international regimes [1,2,4]. St John's research includes testing novel methods for assessing rule breaking in conservation [1,2,3].



d) Conservation Biology

Colleagues are engaged in expressly applied research ranging from the conservation of threatened species (Griffiths [3,4], Groombridge [2], Bennett [1,3,4] Roberts [1,2,3,4], Davies [1], Struebig [3]), through to the protection of habitats and ecosystems via spatial ecology and conservation planning (Davies [2,3,4], Smith, Struebig [3], Bennett [2], Tzanopoulos [1,2,3]). This includes long-running projects on amphibians and reptiles (Griffiths), and birds in Hawaii, Mauritius and Seychelles (Groombridge [1,3]). Roberts examines species detectability and extinction, orchid ecology, and the role of the internet in the wildlife trade. Bennett works on evolution, ecology and conservation of birds. Griffiths, through current projects, is working on developing species recovery programmes, as well as designing more effective methods for monitoring reptiles and amphibians using mark-recapture and site occupancy models [1,2]. Groombridge's research focuses on population genetics and conservation of endangered populations [4]. Smith's work focuses on protected area network design and conservation planning [1,2]. Struebig works at the interface of forest and agriculture in Southeast Asia and evaluates the impacts of land-use change on biodiversity [1,2].

RESEARCH STRUCTURE: PROMOTION AND SUSTAINABILITY

SAC research strategy promotes and sustains research activity in a number of ways. These include a clear structure of committees and research support, closely linked to the wider University environment, public engagement, and business development.

School/University Research Governance: SAC has a robust research structure aimed at supporting and developing research excellence in the 4 groupings. Responsibility for SAC's research and PGR programmes lies with the Head of School, through the Director of Research, Faculty Research Committee, and University Board of Research. The University's dedicated research support office provides advice and training for colleagues in SAC, especially in developing, costing, negotiating and managing research grants. This includes facilitating interdisciplinarity, through regular 'PVC Lunchtime Seminars' and internal funding to underpin the development of large, complex and interdisciplinary projects (via faculty research funds); an ECR Network; and the award winning 'Grants Factory' programme, in which staff who have been involved with Research Councils and major charities provide advice to those with less experience (Duffy and Bennett have acted as key contributors to these meetings). All of these initiatives are supported by a comprehensive information service, utilising traditional and new media, of which SAC's Twitter feed and Facebook pages are good examples. We have a Research and Ethics Committee, convened by the Director of Research. It focuses on the strategic development of research themes and funding applications, but it also oversees practical issues including risk assessment and health and safety. We are keen to continue to develop our research-active culture and so implement a workload allocation model to ensure that all staff are given the opportunity to balance teaching, administration and research. We also operate a study leave policy (detailed below).

Public Engagement, Impact and Commercialisation: We host two high profile annual public lectures: the annual Stirling and DICE Lectures; we also co-sponsor the Annual Distinguished Ethnobotanist Lecture in collaboration with the Royal Botanic Gardens at Kew. These important public events contribute to the University mission on public engagement. We are committed to developing partnerships with NGOs, businesses, universities, charities, governments, international agencies and private investors. We have a dedicated Business Development Manager tasked with raising SAC's profile and an associated increase in income through encouragement of enterprise activity. Finally, SAC works closely with the University's International Office, via a newly appointed International Liaison Officer (MacMillan), to develop international linkages in research and postgraduate recruitment. Impact development is supported by the University's Innovation and Enterprise Unit, which provides professional support to translate research into commercial ventures, consultancy or training. For example, Fischer works with Roberts, who was awarded a NERC Pathfinder grant (iTrade, 2013) to employ a business consultant to develop commercialisation, feasibility and business planning for new software to combat illegal wildlife trade.



c. People

STAFFING STRATEGY AND STAFF DEVELOPMENT

SAC has a clear policy to maintain its research strengths through the development of existing staff, strategic post replacement and increasing the number of permanent research-active staff. We have an excellent mix of staff from ECRs to senior professors; the interaction between these staff ensures high quality research via peer review of grants (detailed in Ethics, Quality and Integrity of Research, below), reading and commenting on draft papers and advising on long term research strategy. SAC comprises 36 category A staff, 28 @ 1FTE, 3 category A on 3-year contracts @ 1FTE, and 1 on 0.5 FTE, and Ellen on 0.2FTE. Staff comprise 6 professors, 5 readers, 11 senior lecturers, 11 lecturers and 3 research staff.

Since 2008, we have actively developed our staffing strategy, so that key areas of strength grow (e.g. biological anthropology) while others are sustained following retirements and departures (e.g. Conservation Social Science). Watson, Just and Corbin have retired, and Zeitlyn, Legge, Leader-Williams, Rosser, Harrop and Walpole departed. Each were replaced (along with **Parkes** and **Ellen**), for example in socio-cultural anthropology, where **Theodossopoulos**, **Pina-Cabral**, **Hodges** and **Henig** now embed excellence in Europeanist anthropology. Biological Anthropology was strengthened with additional appointments (see below). **Duffy**, appointed Professor in 2012, and **St John** brought expertise on conservation social science.

In RAE2008 we reported expertise in biological anthropology focused around three early career scholars. Since then we have developed and expanded this group. Mahoney, appointed lecturer in 2008 to replace Legge, brought expertise in osteology, forensic and dental anthropology. Lycett, and von Cramon-Taubadel, appointed lecturers in 2008, brought expertise in human biological and cultural evolution. Humle, appointed as lecturer in 2009, and Burger and Kivell, appointed lecturers in 2013, further extended our expertise in human and primate evolutionary biology. We have also supported career progression of existing staff so that they are emerging as leading researchers in the field (Lycett and Newton-Fisher promoted to SL in 2010 and 2012 respectively; Johns and von Cramon-Taubadel to SL, and Kivell to Reader, in 2013). Since 2008, two members of staff have been promoted to professor (Griffiths and MacMillan). Kivell, Groombridge, Theodossopoulos and Bowman have been promoted to reader. The gender balance (in number and seniority) has improved significantly with the appointment of its first woman professor (Duffv) in 2012 and the appointments of von Cramon-Taubadel. Davies. St John, Humle, Bovensiepen and Kivell since 2008. Davies and Duffy offer key leadership roles in research activities in SAC, acting as academic heads of Conservation Biology and Conservation Social Science, respectively.

Fellowships: Academic staff held prestigious fellowships and have developed key esteem indicators. These include, for example, **Griffiths'** election as President of the British Herpetological Society; he is also International Conservation Research Fellow of the Durrell Wildlife Conservation Trust. **Duffy** was elected Fellow of the Society of Biology (FSB) in 2011 in recognition of her contribution to public understandings of science. **Ellen** was elected to the Council of the British Academy 2010-2013, and served as President of the Royal Anthropological Institute 2007-11. **Pina-Cabral** is Fellow of the Portuguese Academy of Sciences, of the Spanish Royal Academy of Moral and Political Sciences, and Honorary Fellow of the Royal Anthropological Institute.

Postdoctoral Researchers: Between 2008-2013 SAC had 8 postdocs funded by: AHRC, British Academy, Leverhulme, Govt. of Catalunya, with a further 4 postdocs employed as RAs on projects. From 2007-10 we hosted the RAI Urgent Anthropology Fellowships: Novellino (2007-9), Thornton (2008-10), Singh (2009-11), Dawut (2010-12). **Deter** manages KORA and works with **Mahoney**. **St John** (2010-2014) works on illegal behaviours and was recently awarded £86,673 from DEFRA and the Environment Agency 2011–2015 to examine illegal waste disposal; **Struebig** (2010-2013) and **Eren** (2011-2013) were awarded Leverhulme Trust Early Career Fellowships, both produced several high quality research outputs, and **Struebig** is now a permanent member of staff.

Equality Of Opportunity, Research Quality and Integrity

At the University level, HR strategy and policies support the research environment though the



effective recruitment, selection and induction of staff; good employment practices, including a mediation scheme and work/life balance initiatives; a promotions' process which recognises and rewards all aspects of academic excellence; and proactive equality and diversity initiatives. Furthermore, the University joined the Athena SWAN network in 2008, which is the Charter for Women in Science. Equality of opportunity, research quality and integrity is also supported by the following mechanisms, which are subject to regular review:

Study leave: We have a fundamental commitment to fieldwork, encouraged by supportive financial administration and insurance schemes, and have sabbatical allowances of 1 term in 7.

Professional development: The University supports continuous professional development for research staff via: Learning and Development (leadership programmes, generic skills, equality and diversity training); the Unit for the Enhancement of Learning and Teaching (accredited academic development programmes and academic CPD, including specific content on researcher career development); and the Graduate School (Researcher Development Programme for postgraduate students and postdoctoral researchers) and Research Services (Grants Factory and Early Career Researcher Network).

Early career, research and part-time staff: We actively cultivate the careers and participation of part-time, research and early career staff in all our research and teaching areas including co-authorship on publications and funding applications, supervision of PGRs and teaching at UG and PG level. Arrangements for ECRs include probationary mentors, appraisal, and PGCHE (teaching relief of 0.3 in year 1, 0.15 in year 2). Several staff benefited from ECFs and related funding, e.g. **Bovensiepen** (Musée du Quai Branly 2010–11) and **Henig** (Wenner-Gren Post-PhD 2012–14). **St John** is involved in teaching at UG and PG levels, in addition to co-supervision of PGRs. Incentives stimulating research include Faculty grants (up to £5000), a staff development programme, and ECR network (detailed above) with training in research skills, languages and PGR supervision.

Ethics, quality, and integrity of research: We have a Research and Ethics Committee, which reports to the University Research Ethics and Governance Committee. Ethical clearance is required for all grant applications and projects. Major grants are scrutinised by our Committee, as required by RCUK. We operate within the ESRC Research Ethics Framework, and guidelines of relevant professional associations e.g. ASA, AAPA, International Society of Ethnobiology (ISE). The School subjects all grant applications to internal peer review, and major applications are also scrutinised via peer review procedures facilitated by Research Services.

RESEARCH STUDENTS

Our PGR programme is very successful in terms of maintaining PGR numbers, submission rates and range of employment for our graduates. The PGR community has increased since RAE2008. A total of 48.5 PhDs have been awarded during the period 2008-2013, and 73 are currently registered. The majority of PhDs (approx. 70%) students have submitted within 4 years.

We are recognised for AHRC, ESRC-NERC, ESRC-MRC competitions, and are the ESRC-DTC Anthropology leaders in the SE Consortium. In partnership with UEA and Essex, we receive studentships and deliver training through 'EnvEast', one of 15 Doctoral Training Programmes recently approved by NERC. The Kent component of the bid was driven by DICE, and a staff member is represented on the DTP Management Board. Alongside regional partners, we successfully bid to receive AHRC funding via the Consortium for Humanities and the Arts South-East England (CHASE) doctoral training partnership. Within Conservation, SAC has been awarded several prestigious studentships including 6 NERC-CASE awards, and in 2011 DICE was awarded an additional discretionary studentship for being in top position for success in the ESRC-NERC PhD studentship competition. SAC has been highly successful in obtaining Darwin Initiative grants, with 27 grants awarded, placing it 4th out of 240 organisations awarded grants since 1992. SAC bursaries of £500 p.a. are available for students without ESRC/NERC funding, as are Faculty hardship funds of £400 p.a. Awards received since 2008 include: ESRC-DTC, ESRC 3+1, ESRC-MRC, ESRC-NERC, ESRC-CASE, NERC Open CASE, University of Kent Alumnus, 2 Horniman Trust Fieldwork Grants, Leverhulme Research Funding, 10 University Scholarships (covering fees



at the Home/EU rate plus a maintenance grant), 10 Kent 50th Anniversary Scholarships (equivalent to RCUK funding), and 20 SAC Graduate Teaching Studentships (covering fees at the Home/EU rate). We have secured 'capacity building studentships' offered by NGOs and Trusts including the Christensen Fund, WWF, Rufford, Panthera, and by national governments such as Foundation for Science and Technology (Portugal), CAPES (Brazil), CONACYT (Mexico), Cannon Collins Trust, Singaporean National Parks Board, the National Commission of Science and Technology of Chile (CONYICT), the Mohammed bin Zahed Species Conservation Fund and the Ministry of Education, Science and Culture of Japan. Joint supervision with other institutions generates excellence, as illustrated by Cortés Vásquez (Seville) who was awarded 2nd prize in a national competition for the best social science PhD in Spain, 2011.

Research Student Training and Supervision

The University level Graduate School was established in 2008 with a mission to lead and champion the strategic development of provision for graduate education and research at the University of Kent. To this end, the Graduate School runs the Researcher Development Programme for all postgraduate research students and postdoctoral researchers. Within SAC, the synergies between our 4 research groupings create a stimulating interdisciplinary context for graduate research. Supervision across SAC is based on panels that include 2 supervisors, a chair and/or supplementary member. Monthly formal and reported contact takes place between student and supervisor, together with an induction review (6 weeks), probation review (10 months), second year review (24 months) and third year review (36 months). The supervisory panels monitor training (e.g. personal development plans), engagement with the Researcher Development Framework (supported by the Graduate School), and review progress.

PGRs attend 3 doctoral training courses in analytical and ethnographic writing, reviewing and critical skills, and professional development skills. They also benefit from (i) access to PGT modules that encourage them to engage with conceptual and theoretical approaches, as well as quantitative, qualitative and natural science research methodologies, and (ii) the opportunity to audit modules from across SAC. Visual techniques are taught in up-to-date analogue and digital laboratories. We encourage students to use an RCUK-recognised Faculty programme. Research training is available via Kent's Unit for Enhancement of Learning and Teaching, ATAP, PGCHE, and the Graduate School. All PGRs have access to desk space with networked computers, and a Library allowance of £120 to purchase research texts. We encourage conference participation, supported by a Faculty fund: PGRs presented at ICE 2009, 2012, EASA 2012, AAA 2012, IUAES 2013, AAPA 2011 & 2012, IPS 2010 & 2012, PSGB 2010 & 2013, and other venues. PGR Miszkiewicz has twice won the AAPA Pollitzer travel grant to attend and present her research; Verissimo won the Best Presentation Award at the XII Meso American Congress of Biology and Conservation, San Salvador, El Salvador in 2008, and in 2012 he won the IUCN Thomson Reuters Media Award.

CBCD's specialist programmes (e.g. with Kew) also train candidates for research degrees. We are in a EU consortium of 10 universities, which runs an Erasmus Intensive Programme on interdisciplinary methods for study of biocultural diversity, and hosted this programme in 2010.

Evidence of a Strong and Integrated PGR Culture

PGRs in SAC are supported by a wider University framework. Each year the Graduate School Postgraduate Experience Awards fund a number of student-led events. PGR participation in SAC and Graduate School events facilitates networks, dialogue, and peer reviewing. PGRs hosted the 2nd RAI Postgraduate Conference (09/12). We participated in (i) the Erasmus Intensive Programme on Biocultural Diversity and (ii) the Marie Curie Humanitariannet 'Humanitarian Crises and Conflict Studies' (Early Stage Training 2005–09) enabling PGRs from 10 EU universities to undertake supervised research exchange visits and Kent PGRs to undertake supervised research on their campuses. PGRs benefit from engagement with visiting speakers: for example, we arrange for PGRs to have a linked workshop with the keynote speakers for the annual Stirling and DICE lectures. This gives them access to leading authorities in their respective fields. Equally, PGRs are encouraged to attend the regular seminar series within SAC, and three additional postgraduate seminars. As a result, PGRs are active members of our community, contribute to



seminars and peri-academic activities, and often publish before graduating (e.g. **Al-Mohammad** in *Ethnos*; **Veríssimo** in *Nature, Conservation Letters*; **Gardner** in *Oryx, Journal of Applied Ecology*, **Miszkiewicz** in *International Journal of Osteoarchaeology*, and Kaburu in *Animal Behaviour*, amongst others).

Postgraduate Employability

Our interdisciplinary environment provides an opportunity to tap into comprehensive training that crosses the natural and social sciences, allowing PGRs to develop transferable skills that equip them for employment in many fields. PGRs study with practitioners from outside academia (e.g. Kew, a range of conservation NGOs and government agencies), acquiring specialist skills which enhance employability.

d. Income, infrastructure and facilities

One of the key features of SAC is the breadth of our funding success. Funders include international organisations, RCUK, national governments, NGOs, private sector and charitable trusts. This reflects the unique configuration of our research interests. We maintained high levels of income, with over £4.3 million awarded since 2008. Highlights include: 4 grants from the ESRC (Theodossopoulos, Duffy, Fischer); 6 NERC awards (Griffiths, Struebig, Davies, Groombridge, Roberts and Fischer); 7 Leverhulme awards (Eren, Lycett, Ellen, Von Cramon-Taubadel, Groombridge, Struebig, Newton-Fisher); 4 Christensen Fund grants (Ellen); EU funding (Groombridge); European Commission (Tzanopoulos); 5 DEFRA awards (Griffiths and St John); British Academy (Bovensiepen, Bowman, Ellen, Eren, Hodges; Mahoney); Royal Society (Mahoney); Wenner-Gren (Henig); 5 Natural England awards (Davies, Smith); 5 Darwin Initiative grants (Davies, Griffiths, Groombridge, MacMillan); US Fish and Wildlife Service (MacMillan); Global Environmental Facility and World Bank (Smith); Mohamed bin Zayed Species Conservation Fund (Struebig, Humle). This rich range of funding has been converted into high quality academic outputs, official reports and advisory roles that make a significant contribution to our impact agenda.

Our research has been supported via major infrastructural developments. In RAE2008 we reported relocation to a new building enabled by SRIF2. We continue to develop this space, which includes labs for advanced computational methods (with specialist servers); molecular genetics; ecology; GIS and advanced computational capacity for undertaking statistical and spatial analysis; biological anthropology (focused on osteology); ethnobiology (ethnobotany/taste perception); experimental lithics; and visual anthropology (darkroom/digital lab). We have a new editing and photographic processing node comprising 2 computers and screening facilities, enabling training for PGRs, staff and visitors. A Royal Society grant (2012) funded new hard tissue histology research equipment for KORA; SAC funds support collagen extraction equipment for stable isotope analysis. CBCD curates a spirit collection, a research herbarium, a University-funded ethnobotanical garden and the Powell-Cotton collection of SE Asian ethnography. We also have an on-campus field trials area (under Griffiths) that is used for long-term ecological monitoring (12-yr data sets) and experimental fieldwork. Finally, we continue to benefit from ongoing major infrastructural investment across the university, for example, the £18 million Templeman Library extension (2013-15). The extension will create 512 new study spaces, a new exhibition space, and house a 250 seat lecture theatre, eight seminar rooms and Special Collections archive. The aim is to provide better facilities for group and individual study, as well as increasing dedicated space available to postgraduates.

e. Collaboration and contribution to the discipline or research base

SAC is a leading model of interdisciplinary research. It not only crosses sub-fields in anthropology, but also integrates other social sciences (law, politics, economics, psychology) and natural sciences. Evidence of joint publication includes **Ellen, Lycett** and **Johns**, *Understanding Cultural Transmission*, with contributions from colleagues from all research groupings in SAC. Furthermore, biological anthropology and conservation biology have synergies via work on primatology (**Humle**, **Newton-Fisher**) and on plant taxonomy (**Von Cramon-Taubadel, Roberts**). SAC staff link with several other departments in the University, including Psychology, Economics, Kent Business School and Kent Law School (e.g. **Davies, Roberts, Johns, Groombridge, MacMillan, St John**).



NATIONAL AND INTERNATIONAL COLLABORATIONS

We have developed extensive international links in pursuit of research excellence. We have close links with at least 20 institutions in the UK and MoUs with 56 institutions overseas. Good examples include:

- a) Socio-Cultural Anthropology: **Pina-Cabral** directs 'The Territorial Web', 2010-13, funded by Ministry of Science (Portugal); Padjadjaran University, Bandung (Indonesia), COST Action ISCH A31 (**Ellen**) amongst others.
- b) Biological Anthropology: Max Plank EVA (**Newton-Fisher**, **Kivell**); Max Plank DR (**Burger**); Simon Fraser, Hawaii, Guangxi Museum of Nationalities (**Lycett**).
- c) Conservation Social Science: **Humle** collaborates with Pan African Sanctuary Alliance member sanctuaries, Wildlife Research Center and Primate Research Institute of Kyoto University Japan, is a member of the UNEP Great Apes Survival Project, and on the Executive Committee of the IUCN/SSC Primate Specialist Group.
- d) Conservation Biology: University of Queensland, University of Stellenbosch, University of Swaziland, Ifremer, CEFAS, Université de Caen Basse Normandie, Ezemvelo KwaZulu-Natal Wildlife and the University of KwaZulu-Natal (Smith); Durrell Wildlife on Jersey, Mauritius Wildlife Foundation, Seychelles Islands Foundation, USFWS, International Zoo Veterinary Group, Queen Mary University of London, Zoological Society of London (ZSL) (Groombridge).

COLLABORATION WITH INDUSTRY, COMMERCE, THIRD SECTOR AND OTHER USERS

Our researchers engage pro-actively with users. In group (a) CBCD collaborates with Kew, Global Diversity Foundation, and Stockholm Environment Institute. We also house the Powell-Cotton's SE Asian ethnography collection, which is used for both research and teaching. **Fischer** produced an online ethnobiological database with the Cook Islands government. In group (b), **Mahoney** as Director of KORA collaborates with local archaeology services, 12 reports were provided to Canterbury Archaeological Trust and other partners. In group (c) **MacMillan** has worked with the UK Forestry Commission on wild deer management and venison markets; **Tzanopoulos** has worked with the European Environment Agency and the European Topic Centre/ Biological Diversity on future revision and development of the EUNIS habitats classification. Finally, in group (d) **Griffiths** has worked with Natural England, Scottish Natural Heritage and Countryside Council for Wales, and to develop new survey protocols for amphibians and reptiles in the UK (NERC Knowledge Exchange grant). **Roberts** has collaborated with National Wildlife Crime Unit, UK Border Force, UK CITES Scientific Authority for Plants, International Fund for Animal Welfare, and Ministry of Defence (MoD) on the issues of illegal wildlife trade.

CONFERENCES, SEMINARS, JOURNALS

a) Conferences, symposia and seminars: Colleagues have taken the lead in organising numerous key conferences and research related events. These include 'The Boundaries of Classification', COST Conference, Kent, 2008 (Ellen); 'Quantitative Genetic Approaches to Human Phenotypic Evolution', International Symposium, AAPA Annual Meeting, Chicago, 2009 (Von Cramon-Taubadel, co-organiser); and the symposium Inhabiting the World organised by Pina-Cabral's research network, May 2013 at the State University of Campinas (Brazil) with support from the São Paulo State Foundation for Research Assistance. In-house, we run cross-disciplinary, staff-graduate weekly seminars in both anthropology (average weekly attendance of 25 from 2008-12) and conservation (open to all students and staff, with an average weekly attendance of 60).

We speak internationally, having presented 320 conference papers since 2008, and regularly convene panels, e.g. at AAA 2009, 2010, 2012, ASA 2008, EASA 2008, 2010, EHBEA 2009, ICE 2012, IPS Congress 2008, 2010. **Griffiths** is Chair, International Herpetological Committee of the World Congress of Herpetology and was Convenor of symposium at the 7th World Congress of Herpetology, Vancouver, 2012; **Humle** was invited plenary speaker at the Congress of European Federation of Primatology (Zurich, 2009), and co-organised the Primate Society of Great Britain Meeting, Kent (2012); **Hodges** was a member of the core working group for the ESRC Seminar Series 'Conflicts in Time', 2008-11; **Johns** co-convened the ESRC-funded Darwin's Medicine series, Kent, 2009.

b) Keynotes and distinguished lectures: e.g. Ellen: RAI Presidential Addresses (2009, 2011), ASA 2009, 2012, Kenneth Kirkwood and Layton Lectures 2013; Griffiths: Keynote at European Herpetological Meeting, Luxembourg (2011); MacMillan: invited speaker at Distinguished



speakers Lecture Series, Peking University, China (2011); **Theodossopoulos:** invited plenary lectures, ASA2009, EASA2012; **Pina-Cabral**: inaugural speech, X RAM-Mercosul Conference, Córdoba, Argentina 2013.

c) Editorships: We are involved in editing 46 journals and monograph series. Examples include Journal of the Royal Anthropological Insitute (Bowman, editor 2004-08), Anthropological Theory (Bowman, assoc. ed. 1999-); Studies in Environmental Anthropology and Ethnobiology (Ellen); Economic Botany (Alexiades); Análise Social (Pina-Cabral, editor 2011-); Journal of Archaeological Science (Lycett, assoc. ed. 2012-); History and Anthropology (Henig, assoc. ed. 2011-). Conservation and Society (Duffy); PLoS ONE (Bennett, Davies, Roberts acad. editors). We act as reviewers for more than 130 international journals and publishers: e.g. American Anthropologist, American Journal of Physical Anthropology, Current Anthropology, International Journal of Primatology, Journal of Human Evolution, Journal of the Royal Anthropological Institute, Proceedings of the Royal Society B, Proceedings of the National Academy of Sciences, Science, Cambridge University Press, Yale University Press, Indiana University Press, Oxford University Press, Routledge.

SERVICES TO RESEARCH COMMUNITY

Colleagues in SAC have made important and leading contributions to the wider research community. These include working with professional associations and international funding bodies. a) *Service to Professional Associations:* we serve on 48 professional associations, research councils & funding bodies, examples include RAI (Ellen, President 2007-2011, Bowman); British Academy (Ellen); AAA (Fischer); ISE (Alexiades, Ellen); Carnegie Trust, HEFCE RAE2008, REF2014 (Ellen); Darell Posey Foundation (Alexiades, co-Chair 2012-); Academy of Sciences, Lisbon (Pina-Cabral); Horniman Fund (Bowman); Primate Society of Great Britain (Newton-Fisher, Humle); International Society of Primatology, the European Federation of Primatology, as well as member of the Executive Committee of the IUCN/SSC Primate Specialist Group section on Great Ape Conservation (Humle); EASA (Pina-Cabral, Theodossopoulos); European Human Behaviour and Evolution Association, Biosocial Society, C-SAP (Johns); Amphibian and Reptile Conservation Trust, Amphibian Conservation Research Trust, Natural England/Defra Amphibian health advisory committee, International Union for the Conservation of Nature (IUCN) amphibian reintroduction working group (Griffiths); Linnean Society of London (Groombridge).

b) Assessors for funding agencies: these include NERC (Davies, Groombridge, Griffiths, Roberts, Johns), ESRC (Bowman, Bennett, Duffy, Griffiths, Groombridge, MacMillan, Tzanopoulos), AHRC, (Bowman, Ellen); Leverhulme Trust (Duffy, Struebig; Humle); Leakey Foundation (Lycett, von Cramon-Taubadel, Newton-Fisher, Humle); the US National Science Foundation (Newton-Fisher, Lycett, Duffy, Mahoney); the US Social Sciences Research Council, The Swiss National Science Foundation (Duffy); Netherlands Organisation for Scientific Research (Lycett, Duffy).

CO-OPERATIVE AND COLLABORATIVE ARRANGEMENTS FOR PGR TRAINING

- a) National and International Co-operation: e.g. Establishment of ESRC-DTC pathway in anthropology (**Bowman**) and Environment, Energy and Resilience for SE Consortium; Kent Co-ordinator of European Doctorate Enhancement Programme in Peace and Conflict Studies, Marie Curie 1997-2009 (**Bowman**); Development of PG Diploma in Endangered Species Management that will be taught entirely in Mauritius with partners Mauritian Wildlife Fund and Durrell Wildlife (**Groombridge**).
- b) External Examining. Since 2008, we have acted as externals for 69 doctoral theses: 35 in UK (e.g. SOAS, LSE, University of Cambridge), and 34 overseas (e.g. University of Sao Paulo, University of Cape Town, University of Melbourne, University of Queensland, Vrije Universitet Amsterdam).

In sum, the School of Anthropology and Conservation prides itself on providing a stimulating, dynamic interdisciplinary environment for career development of young researchers, and a unique world leading research culture for the creation of cutting edge research by its senior staff. On the basis of output, projects and provision, the School is confident of its ability to generate further significant growth and productivity across its multiple fields of research during the next REF period.