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Institution:	University of Northumbria at Newcastle
Unit of Assessment:	34 - Art and Design: History, Practice and Theory
a. Overview	
<p>This UoA embraces research in Fine Arts, Human-computing Interaction Design, and Visual and Material Culture. Our research integrates academic innovation with critical exploration. Six groups, described below, undertake research in collaboration with industrial, creative and cultural industries. In the REF period, the Unit has doubled its PhD completion rate and extended the impact and volume of its research activity across all areas of art and design at Northumbria.</p>	
b. Research strategy	
<p>Since 2008, Northumbria's Strategic Investment Fund (SIF) has invested £18m in existing and new research-active staff across the University. Investment in Art and Design has been focused on new appointments; enhanced support for managed research activity; and the provision of new, collaboratively-focused facilities for staff and research students. New posts - including eight Professorships – have renewed Unit and research group leadership and have increased opportunities for cultural and commercial research, developed networks, extended impact, mentored Early Career Researchers (ECRs) and nurtured the next generation of researchers.</p> <p>Increased support for research has further extended the Unit's approach to increasing the range of its external funding streams. Research income recorded in RAE 2008 (joint-UoAs 63 and 64) was £2.7m. In REF 2014 it is £4.1m. As a result of University investment in the Research and Business Services function and the Faculty's structured peer-review systems, research income has been drawn from a broad range of RCUK, European, governmental, charity and commercial sources (and Arts Council awards). Similar growth follows our Unit's support for the next generation of researchers. PhD completions numbered 14 in RAE 2008, it is 39 in REF 2014. With a total of 68 PGR students enrolled in 2013, support has come from University-funded postgraduate studentships awarded to Art and Design, which have risen from two in 2007/8 to 10 in 2012/13, complementing six supported via external schemes.</p> <p>Support for staff research includes increasing the proportion of workload hours allocated to research. The sabbatical scheme has enhanced research activity. Together these changes have resulted in an overall increase in published outputs, a quadrupling of applications for research funding and a 40% increase in staff being entered into REF 2014 compared to RAE 2008.</p> <p>Investment in collaborative research and dissemination has supported knowledge-sharing and formation with stakeholders in the museum sector and design industries. An award-winning example is Northumbria's partnership with BALTIC Centre for Contemporary Art, which includes the <i>BxNU Institute</i> housed in Baltic 39; a hub for contemporary arts in the heart of Newcastle upon Tyne supported by Newcastle City Council and Arts Council England. An advisory group for this initiative includes BALTIC's Director and Chief Curator, and Arts' senior research staff are housed there with specific roles to support research and mentor students. Northumbria's partnership with BALTIC was recognised as the 'best example of Excellence and Innovation in the Arts' in the <i>Times Higher Education Awards</i> in 2012.</p> <p>Research Groups in Arts Three groups integrate history, theory and practice in their research. The three are: <i>BxNU Institute</i>; <i>Visual and Material Culture</i>; and <i>Performance and Identity</i>.</p> <p>The <i>BxNU Institute</i> aims to invest research capacity into professional contemporary art, performance and curatorial practices. Outputs often result from mixing collaborative art practice with distinctive performance methodologies, such as Tatham and O'Sullivan's commissioned performance, explicitly devised to examine the physical and conceptual structure of theatrical staging. Projects include Dorsett's curation at a National Trust (NT) property, complementing</p>	

Crisp's 2012 installation at Matt's Gallery, London (following her NT-funded photography residency at Stourhead in Wiltshire) and **Campbell's** context-specific intervention for Manifesta 8 Biennial of Contemporary Art 2010-11. Collaboration with BALTIC included a major installation and symposium during the British Science Week 2013. Recent appointments have opened up new lines of science-based and practice-led enquiry, including **Borland's** collaborative Creative Scotland funded project on the Anatomy Dissection theatre as a performative space and **Lee's** Leverhulme Trust funded research with the National Oceanography Centre. Early Career Researchers have contributed significantly in this area. Examples include **Danby's** curatorial contextualisation of British and north American art; and **Hughes'** and **McCrea's** work on Ireland's recent national-historical narratives.

Other related Fine Art research includes **Perry** and *Singer's* work on the conservation needs of the Francis Bacon Estate. This is complemented by **Grimaldi's** work on Gainsborough's 'Suky' (1761) at Wallington for the National Trust; and **Theodorakopoulos'** conservation science research on inorganic and organic materials, including painted works of art and decorations in architectural monuments and other heritage materials and objects. **Bowen's** practice, relating the indexical and the archive to contemporary drawing, was resourced through Paper Studio Northumbria and has expanded the Unit's interdisciplinary expertise in conservation research.

Visual and Material Culture's research is primarily in the histories of art and design of the nineteenth and twentieth centuries in Britain, Europe and North America. Key concerns include cultural heritage and participation, nationalisms and cultural identity, the art market and art criticism, cultural landscapes, and concepts of community and social change. Research subjects include: collecting and patronage in art and design in the 1920s and 30s (focused on work by **Gee** and by **Holt** as editor of *Visual Culture in Britain*); creative practices and geographies of space and place, including **Holt's** AHRC-funded 2013 network 'Northern Peripheries'; **Stokoe's** work on photographer EO Hoppé's observations of London's interwar social changes; **Richardson's** 'Scottish Art since 1960' (2011); **Ashmore's** contestation of regional-national histories; **Gee's** work on transnationalism in visual and material culture, extended to Germany, Australia and Japan by **Potter**, **Kramer** and the newly-appointed Research Fellow **Rahman**. Nineteenth- and twentieth-century fashion and textile and other design histories were established by *Buckley* (who left Northumbria towards the end of the REF period) and developed by **Kramer**. **Ashley** extended the group's contributions to cultural heritage and policy research. Research foci were enhanced by conference organisation including 'North' (2009) and 'Transnationalism and Visual Culture in Britain' (2009).

Performance and Identity undertakes research which is focused on advancing methodologies in contemporary performance and visual art practice. The group's research includes **Gilroy's** investigation of Afghanistan and Iraq combatants' personal relationships in 'Motherland' (2008); **Arnfield's** 'The Tin Ring' (2011) based on a Holocaust memoir; and *Johnston's* autobiographical performed testimonials related to Northern Ireland's recent history and the broader contestation about the evidence of social injustice. **Power's** theorisation of presence advanced the relationship of philosophy to performance and continues. This group is currently developing research related to disability, mobile communications and site-specific modes of dissemination, including **Craddock's** direction of the Gateshead International Festival of Theatre (GIFT).

Research Groups in Design

The UoA's design research is generated within, through and for commercial and social contexts. It is organised in particular in three groups: *Interaction Design* (a multi-disciplinary group that includes the Psychology and Communication Technology Lab 'PaCTLab'); *Design Issues*; and *Innovate*.

Interaction Design research combines design, arts and human science perspectives to advance the potential for Interaction Design to make beneficial changes in a range of challenging settings. This research has often developed within RCUK-funded projects. The group takes a multidisciplinary approach to the development of research contributions to broad objectives such as usable security or community empowerment. **Blythe** develops new design and user research

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practices in projects on the creative digital economy, and on ageing and wellbeing. **P Briggs, Little** and **Coventry** explore how design can influence behaviour-change across the lifespan and have secured over £2m in RCUK, TSB and EU funding for research in energy consumption and health choice. Their recent EPSRC project on identity management was showcased in RCUK and UUK's 'Big Ideas for the Future.' **J Briggs** investigates current problems for artists working in digital media. **Light** researches community empowerment through technology and other design interventions. **Cockton's** work combines practice-based research on design and evaluation approaches with foundational analyses of the structure of design work and the role of re-usable resources and approaches. **Gibson's** development of immersive environments enables the application of audio and video technologies to the production and analysis of dynamic interaction.

Design Issues research is typified by investigations that address complex and interdependent social problems, where issues are not isolated to any one particular sector or discipline and can be characterised as emergent phenomena. For example, **Rodgers'** AHRC-funded 'We Are All Designers' Network examines the discipline of design in an era of globalisation, increasing digitalisation and conceptual, methodological and professional boundary blurring in health, engineering, art and economics. **Spencer's** work contributes to an understanding of dissatisfaction in a design context and knowledge and 'mindfulness meditation' as a technique for improving the quality of reflective design practice. **Boys'** JISC-funded work on 'learning spaces' investigates learning linking the museum and the university.

Innovate's research focuses on the public and third sectors, draws upon business and management disciplines and advances the theoretical foundations of design practices that guide commercial innovation. In addition research is applied through material and technological processes, for fashion products and public exhibitions. Research support for the group has been awarded by several sources, such as the Inditex and the International Textile Garment and Leather Workers Federation funded Chair in Ethical Fashion (2008-11) and a Knowledge Transfer Partnership with Age Concern UK. Of central importance to the group was the 2008-11 'ONE North East Single Programme' and ERDF funded 'Nurture - Healthcare Technology Development Programme' (£1.17m), which enabled design-led innovation in healthcare product and service development, directly with established SMEs in the healthcare sector. **English** explores and applies his Multiple Perspective Problem Framing approach to unsolved industrial challenges releasing economic value through design. **Williams'** research is concerned with managing and planning the Design business of the future and its emerging implications for the UK Design industries. **Young** and **Yee** address the concepts, theories and practices of social innovation through research on service design and the evolving role of the co-designer in twenty-first century society, in collaboration with public and third sector organisations. Practice-based research includes *Kitchman's* body-wear prototypes and **Kapsali's** innovative uses of biological materials for the design of autonomous multifunctional fibrous products, using multi-material 3D fibre deposition and digital weave technologies. **Ling's** research is concerned with fashion as attitude, the aesthetics of the everyday and the urban construction of identity.

Future strategic research aims

In 2013, Northumbria launched 'Vision 2025' to guide our continued transformation into a research-rich, business-focused university with a global reputation for academic quality. Our strategy will be to strengthen existing partnership-based research and to extend our work, especially in the health-related field. Further work with our partner organisations will develop current collaboration in delivering PGR training and placements, including our recently-awarded AHRC Centre for Doctoral Training consortium (with BALTIC, the University of Sunderland and the National Glass Centre). The Unit will develop a new research group building on strengths in *BxNU, Interaction Design and Innovate; Arts, Design and Medical Cultures* will work with partners in healthcare, the biomedical sciences and the medical humanities. Collaboration with experts in the medical field will build on previous research with Northumbria Healthcare (NHS Foundation Trust). Further investment has enabled additional professorial appointments.

BxNU Institute's research will include **Campbell's** Greendale Arts commission for research into 'the comic' (2014), and **Tatham** and **O'Sullivan's** Bloomberg Space commission (2014) to

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interrogate the relational exchanges through art which is commissioned and collected. *BxNU* will extend the reach of its research through Baltic 39's Talk Studio (with a public teleconferencing facility) and a critic-in-residence programme, to expand international critical engagement. The post-REF period for *Visual and Material Culture* already entails new and contracted monographs including **Holt's** 'Inter-war Visual and Material Culture' (Ashgate 2016); **Kramer's** 'The Material Culture of Mania' (Berg 2015); **Potter's** 'British Art for Australia: 1860-1953' (Ashgate 2014); and **Richardson's** 'The Northern Emptiness' (IB Tauris 2016). **Power's** theorisation of performance continues with 'Stoicism and Performance: A Joyful Materialism' (Rodopi 2014).

Interaction Design will build on interdisciplinary expertise in issues related to cyber-security and identity. **P Briggs** and **Coventry** represent Northumbria as one of six Universities that have founded the new GCHQ/EPSRC funded UK Science of Cyber Security Institute and **P Briggs** leads a three-year, £1.2m EPSRC-funded project in identity and digital personhood beginning October 2013. **Blythe** will collaborate with York University, Oxford University, Digital Laundry and Cedilla Publishing from 2014 within a TSB project on the long-term care revolution. *Design Issues* will continue to draw upon the current rapid maturation of research through design methodologies, with publications including **Rodgers** and **Yee's** comprehensive examination of international design research 'Design Research' and **Boys'** 'Building Better Universities: Strategies, Spaces, Technologies' (both Routledge 2014). From 2014 **Rodgers'** AHRC International Research Network 'Cultures of Creativity and Innovation in Design' includes the Centre for Product Design and Manufacturing at the Indian Institute of Science, Bangalore and the School of Industrial Design at Carleton University, Canada. *Innovate* will develop its multidisciplinary commercialisation housed in the Northern Design Centre and with public and voluntary sectors partners through **Young** and **Yee's** Northumbria DESIS Lab.

c. People, including:

i. Staffing strategy and staff development

Northumbria University supports researcher development through a combination of University-level training, faculty-level mentoring, and Unit-led direction. In 2008, the University implemented an Action Plan in line with the Vitae Concordat to Support the Development of Career Researchers, which sets out the expectations and responsibilities of stakeholders in researcher careers. The Action Plan has been recognised by Vitae and the University has achieved the EC 'HR Excellence in Research' award. This acknowledges our alignment with the principles of the European Charter for Researchers and Code of Conduct for their recruitment, demonstrating that all staff are part of a stimulating, supportive research environment.

Unit staff new to research have equal access to resources (both funding and time) and are provided with access to training and appraisal. The Unit's ECRs benefit from an enhancement of our sabbatical support above that provided for all staff, and are awarded research leave within two years of appointment in order to expedite the completion of major works. Research mentoring of the Unit's new academic staff is complemented by ECRs' attendance at courses on the University's dedicated research-related training programmes, covering essential research knowledge and skills such as developing research funding proposals, research ethics, the commercialisation of research and measuring research impact. Furthermore, Northumbria introduced a Postgraduate Certificate in Higher Education Practice in 2011 for new staff, which includes a major upgrading of the research component of professional development.

Completion of University Recruitment and Selection training is required for those taking part in selection panels and for staff line-managing research staff. All academic staff attend Equality and Diversity training workshops and those aspiring to promotion to either Reader/Research Chair are assigned a mentor to assist the development of their application. Leadership training includes the Unit Lead's completion of a 'Common Purpose Leadership Development' course and leadership training for the Unit's Research and Innovation Directors.

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All academics have a workload research allowance equivalent to 1.5 days per week, with more for Readers and Professors. The Personal Research and Innovation Plan (PRIP) is a document prepared by academic staff annually to record their achieved and planned research and allows a mentor and mentee to agree research objectives. The document covers outputs, impact and knowledge exchange activities, grant applications, PGR supervision and professional and public engagement.

The Faculty Peer Review College provides mentoring for research application preparation, which is preceded by Unit-based mentoring at the crucial early funder-identification stage. Research Funding Managers provide higher-level support including approaching potential external research partners and coordinating large-scale strategic and multi-partner funding initiatives. Together these have increased both the range and volume of the Unit's external application destinations, including **Blythe's** EPSRC 'Re-Bootlegs: Using Platforms and Incomplete Products to Create New Experiences for Users and Income Streams for Musicians' (2013); **Richardson's** 'AHRC Block Grant Partnership 2' (2013) and **Gibson's** European Commission 'Designing and Implementing Narrative Techniques for Interactive Big Data Knowledge Discovery' (2012).

Exchanges between academia and business, industry and public or third sector:

Unit researchers access support for academic and non-HE exchange from the Higher Education Innovation Fund (HEIF). This is an effective seed fund to facilitate preparation of external funding applications, with a focus on impact. HEIF funding has maximised public engagement activity; developed and delivered engagement events; and stimulated networking activities and people exchange - before, during and after research projects.

Collaborative projects, such as those with the National Trust and with Tyne and Wear Archives and Museums, are increasingly formalised within the context of developing external funding bids. Further facilitated networking and exchange arose from competitively awarded three-year Northumbria Anniversary Research Fellowships (including **Rahman, J Briggs,**) marking Northumbria's 20th year as a University in 2012, and other externally funded Fellowships.

In Design, Visiting Fellows and Professors from industry (including *Proctor, Stokes*) were funded by the Royal Academy of Engineering. Others include those with leading roles in commercial design (*Brown/IDEO, Ive/Apple, Trezevant/Pixar*). Collaborative design research has been central to *Innovate's* new appointments' networks of commercial and public sector organisations including Unilever, Proctor & Gamble, British Airways, Trackaphone, Newcastle, Gateshead, North Tyneside and Northumberland Councils, Microsoft, Philips, Nokia, Barclays, Thermofisher and Traidcraft. Collaborative design innovation projects with NE England SMEs and public or third sector organisations were supported by the 'ONE North East Single Programme' and ERDF MDI Bursaries (£570,000). Further outcomes included the Zodiac Learning Ltd KTP 2008-2010 for which **Yee** was Academic Supervisor and the first service design KTP with Age UK Newcastle, funded by the ESRC.

ii. Research students

Since 2007, Northumbria's post-graduate research student population has grown by 30%. The University's Graduate School was established in 2008 to provide a dedicated central support and administration function for PGRs. Skills development and career-planning preparation led from within the Unit complements a structured training programme organised by the Graduate School. Unit recruitment of high quality students has been further strengthened through the provision of University and externally-funded studentships.

Our Unit's research training aims to explore and anticipate conceptual, professional and methodological connections across and beyond Art and Design. PhD projects are aligned with the Unit's research groups and practice-based methodological supervision draws from expertise across the Unit. From induction onwards, Unit PGR students are integrated into the research environment through research-themed seminars, workshops and events to develop their subject knowledge, networking and professional skills. The Unit's PGR Programme Directors (**Campbell,**

Rodgers) have overall responsibility for the management of subject-specific training and oversight of student progression. PGR Directors work closely with staff in the Graduate School to implement and monitor progression milestones, including Project Approval (PA) within three months of enrolment and annual student reviews. Monthly student contact with Principal Supervisors generates an agreed record form and supervisors attend a Regulations update session every three years. The Faculty also has a PGR Staff-Student Liaison Committee.

Arts' successful 2008 bid to the AHRC Block Grant Partnership Scheme (with the University of Sunderland) has further sustained the PGR student cohort across the Unit. It was expanded during 2012-13 for AHRC BGP2 bidding to encompass Design and guided by the spirit of BGP1's emerging regional consortium arrangements. BGP1 leveraged further funding. The Centre for Doctoral Training (CDT) awarded in 2013 is matched with 50% additional studentships and will enable the Unit to develop personalised training pathways. The CDT will enable longer-term collaboration with key non-HEI partners in order to foster knowledge exchange and to ask critical and innovative questions concerning what it means to conduct applied research within the relationship between research and enterprise and the creative and cultural industries.

The collaborative approach within the Unit extends the inter-organisational capacities of our PGRs. This is further resourced by BALTIC – Northumbria Partnership's shared facility at Baltic 39 and its midweek Postgraduate Conversation. Originally confined to Arts' practice-led community, this includes designers, architects, cultural facilitators, educationists and environmental psychologists and is freely accessible to other students undertaking research in universities across the region, as well as the Unit's MFA and MRes students. Additionally, an AHRC Collaborative Doctoral Award (2011-2014) with the Shipley Art Gallery enhanced further Tyne and Wear Archive and Museum collaboration. All our PGR training can be augmented with additional enterprise training in conjunction with the University Business Development team and offers an Entrepreneur-in-Residence scheme with a three month stipend to support the commercial development of PGR projects.

Northumbria's performance in the Higher Education Academy's Postgraduate Research Experience Survey (PRES) is positive in all areas. There has been an upward trend across the surveys conducted in 2008, 2009 and 2011, including areas that were already high scoring, such as supervision and skills development. The largest score improvements relate to intellectual climate, professional development and career opportunities.

d. Income, infrastructure and facilities

Income

As well as significant levels of funding from industry, 47 research projects received RCUK-funding in the REF period. Northumbria has invested in its centralised research support resources, with an enhanced Research and Business Services department to help grow research. Applications for research funding are supported by experienced bid-writers and contract specialists offering pre- and post-grant support in the areas of funding sources, proposal development, navigating the authorisation process, monitoring project spend and assisting in the production of final reports.

Research Council income benefiting PGR growth (non-REF4) includes AHRC 'Block Grant Partnership 1' which totalled £793,057 (Northumbria's allocation £477,517) and 2013's £1.2m award of an 2014-19 AHRC Centre for Doctoral Training funding (**Richardson** as P.I.). **Buckley's** AHRC Collaborative Doctoral award 'Henry Rothschild: patronage, collecting and transnationalism in post-war British crafts' (£108,336) enhanced AHRC Fellowships, including **Buckley's** 2012-13 'Fashioning Everyday Lives in 20th century America and Britain' (£74,504); **Potter's** 2012-13 Early Career Fellowship 'Politics, Patriotism and Painting: the acquisition of British pictures by Australian National Galleries 1860-1949' (£83,587), extended through the Philip Leverhulme Prize for his 'Visual culture and the construction of national identities' (£70,000). **Bowen's** AHRC 'Capturing the Ephemeral' (£32,096) supported her practice-led research. A number of research networks have been funded by the AHRC, including **Holt's** and REF2 outputs were supported through competitive applications to *Arts Councils* including **Arnfield, Bowen, Campbell** and **Gilroy**.

Borland received a prestigious 'Vital Spark' award from Creative Scotland in 2011 (£93,294). Other awards include **Dorsett's** sponsorship of a Leverhulme Artist-in-Residence award for artist-poet Alec Finlay in 2011-12 'Skying: art, landscape and renewable energy'. **Singer** (retired 2011) received £148,000 from the estate of Francis Bacon to support PhD research into Bacon's techniques and materials.

Design research has obtained increasing external research income year-on-year. Design's contribution to, and leadership of, large, multi-centre projects which bridge this research cycle and the next include **P Briggs'** leadership of an EPSRC grant 'Reel Lives: Personal Documentaries Constructed from Digital Data' (£1.135m) with collaborators from Edinburgh, Open and Birmingham Universities and as Co-I in a EPSRC funded consortia 'Choice Architecture for Information Security' as part of the new Research Institute in the Science of Cyber Security (£1.1m with £640,000 to Northumbria). **Little's** EPSRC funded 'Taking on the Teenagers - Using Adolescent Energy to Reduce Energy Use' (£146,127) developed and created innovative participatory design methods to increase awareness and change behaviour related to energy use in the teenage population. **Light's** AHRC funded 'Community-Appropriated Research Model (CARM): from Connectivity to Impact through Making and Media' (£58,891) investigated the use of community radio as a means for sharing knowledge about capacity building and social cohesion in community groups as service provision devolves to community level, leading to a radio broadcast website and an AHRC report (2013). Further research income came from KTPs and industry, including Microsoft, Thermofisher and Novartis. **Young's** leadership of *Innovate's* NURTURE programme was through a combination of ERDF, HEIF and industry funding (totalling £1.17M) for collaborative design-led research and development in healthcare products and services with established SMEs in the sector.

Facilities

Since 2009, Northumbria's estates re-modelling and related equipment capital has been provided to support the construction and equipping of specialist research labs, studios, galleries and the integration of facilities for research-led dialogue between academics and internationally established artists. As well as *BxNU Institute* facility in Baltic 39, and its international programme events, the establishment in 2009 of Gallery North provided an important focus for engagement with practitioners, including funded artists-in-residence and visiting artists; and supported seed and developmental research within the Unit's critical and curatorial practices through exhibitions, seminars and publications.

Northumbria's Strategic Investment Fund provided over £250,000 of non-staff expenditure in support of new appointments, enhanced by research capital funding from HEFCE's Research Capital Investment Fund. A distinctive example of specialist research resourcing is Paper Studio Northumbria, which incorporates a facility for experimental and traditional papermaking with wet and dry areas, alongside seminar facilities and sample archives. This supports innovation by invited external artists informed by the Unit's own research activities. Unique resources supporting scholarly research included The British Visual and Material Culture Archive (incorporating papers of the Design History Society) and workload support for the *Journal of Visual Culture in Britain*.

Design's dedicated building houses a specialist exhibition area with an adjacent presentation hall to provide flexible support for research events. Improved infrastructure for Design research groups since 2008, including *Innovate* and *Interaction Design*, entailed further investment in specialist instruments and equipment. Design's research resources enable the combination of STEM approaches with design insights and expertise, to translate scientific and technological advances in areas such as 3D printing, synthetic biology, organic electronics, sensors and microfluidics, nano-materials and technologies. This is also available for interdisciplinary and commercial research. By the end of 2012, these facilities were fully established, with further investment coming from external funding to meet specific project and programme needs. Funding has thus been aligned with strategy as outlined for RAE 2008 for those areas that require the establishment of completely new facilities, for instance *Interaction Design's* focus on intersections of the physical and virtual worlds.

e. Collaboration and contribution to the discipline or research base*Collaborative Arrangements, Partnerships, Networks and Joint Research Projects*

Cockton is Scientific Co-coordinator of the COST (European Cooperation in Science and Technology) funded 'TwinTide' network. **P Briggs** helped set up two EPSRC Networks of Excellence in CyberCrime and in Identity Management. She was invited to RCUK and India's Department of Science and Technology 2013 workshop in New Delhi to discuss cyber security. **Coventry** collaborated with Trento University, Siena University, Forth, Siemens and INRIA, on the EU-funded Dali project. Together, **Coventry** and **P Briggs** are founder members of the UK's first academic research institute to focus on understanding the overall security of organisations, the UK's Research Institute in the Science of Cybersecurity. They also collaborated with O2, Looking Local, Trackaphone, ADI, Newcastle City Council and Northern Rock on the TSB-funded Ambient Assisted Living project 'Freedom to Roam'. **Gibson** is collaborating with Jilin College of the Arts on a digital media project funded by the Culture Department of Jilin Province, China. **Lee** was awarded a Leverhulme Trust 'Artist in Residence' award 2008 to work alongside sonar processing and sea floor mapping expert Dr Tim Le Bas and other members of the Marine Geoscience research group at the National Oceanography Centre, Southampton. **Light** was consultant to Fjord design company on the Nokia-led EU Smarcos Project. Her AHRC-funded projects involve collaboration with Dundee University and Northern Architecture (FLEX). She collaborated with Royal Holloway and Oxford Universities on the EPSRC Fair Tracing project, and with Loughborough University on the AHRC 'Designing for the 21st Century' programme. She has held P.I. or Co-I status on 12 AHRC-led 'Connected Communities' projects since 2010.

English's work with the National Centre for Printable Electronics led to a Northern Way funded joint research project with Polyphotonix Ltd, currently being trialled in the UK and Czech Republic, which has international relevance for around 300m diabetes sufferers internationally. In addition to being on the Scientific Advisory Board to the Dutch Government for the Creative Industries Scientific Programme (CRISP), **Young** has led a partnership of the AHRC 'DESIS - Design Social Innovation and Sustainability Network', he is co-ordinator of a recognised nDESIS Lab, one of 40 worldwide based in all continents, with **Yee** as Operations Manager. **Holt** is external academic of Tate Britain's inaugural 'British Art Network' Steering Committee 2013. **Williams** was P.I. on an AHRC-funded project exploring the future of the UK design industry with Lancaster University and British Design Innovation (2008-9). He has also worked with SVID (the Swedish Industrial Design Association) and the Universite Politecnico de Valencia on an Interreg Mini-Europe project developing Graduate Design Offices (2010-11).

Membership of Research Council or Committees

P Briggs, a member of the EPSRC Peer Review College, was part of an ESRC Frontiers Meeting to develop an International Centre for Social Media Research. **Cockton** was a member of the commissioning panel for AHRC Heritage Science programme and has been a member of the EPSRC Peer Review College since 2003. **Dorsett** and **Holt** are AHRC Peer Review College members. Membership of AHRC Panels included *Buckley's* 'Block Grant Partnership 1' (2008), Research Grants (2010); **Richardson** as member of five AHRC Panels including Charing Research Grants Panel B (2012, 2013) and moderating applications and booster funds for the inaugural 'UnBox UK-India Fellowships' (2012-13). **Light** has been a member of the EU Science in Society review committee since 2010 and a member of the advisory panel on 'Future of the Internet' (2010); and reviews for AHRC, ESRC and, with **Young**, for EPSRC.

Leading Positions - Subject Associations / Learned Societies / Editorial positions

Cockton served on the 2008-9 Association of Computing Machinery SIGCHI Social Impact and Service Awards Committee. **Coventry** is an Executive Committee Member of the British Computer Society Interaction Specialist group. **Power** is a member of Performance Studies International's (PSi) Working Group 'Performance and Philosophy'. **Rodgers** is on the Council of Research Directors in Design. **Young** was a member of the Design Council UK 'Design of the Times' Dott Cornwall Think Tank (2010) and an external advisor to the Scientific Advisory Board of the Netherlands Creative Research and Industry Scientific Programme (2010). Editorial positions include **P Briggs** for Journal of Trust Management (Assistant Editor); **Coventry** for Interfaces

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(Editor); **Holt** for Visual Culture in Britain (General Editor).

Examination of Doctorates

EU / Overseas: Rodgers in Hong Kong (H.K. Polytechnic University 2013); in Australia **Yee** (Swinburne 2012); **Rodgers** (Swinburne 2013, Canberra 2012, RMIT Melbourne 2012); **Blythe** The Netherlands (Delft 2012); **P Briggs** in The Netherlands (Eindhoven 2009); **Cockton** in Belgium (Hasselt 2011), France (Grenoble 2012), Denmark (Copenhagen 2010), Finland (East Finland 2011, Jyväskylä, Tampere, Aalto all 2012) and The Netherlands (Delft 2010). In addition staff in the Unit examined 31 UK-based Doctorates.

Organisation of Conferences and Scholarly Encounters

Interaction Design's participation in ACM's annual Conferences on 'Human Factors in Computing Systems' include **Cockton** as subcommittee co-Chair for 'usability, user experience and accessibility' in ACM CHI 2009 and 2010; **Cockton, Light** (twice) and **Blythe** as Associate Chairs for CHI (2008, 2012 and 2013). **Cockton** co-chaired three ACM Doctoral Consortia (CHI 2009, CHI 20101 and 'Designing Interactive Systems' 2012). **Light** founded the 'Inspiring Digital Engagement Festival Conference' (2010) and was Co-Director of 'Ethicomp' (2011). **Coventry** and **Little** were co-Chairs for BCS HCI (2011) and co-chaired the 2013 ACM of Symposium on Usable Privacy and Security (SOUPS) at Northumbria, the first time this leading conference has been held outside of the USA. **Coventry** served on the programme committees for SOUPS (2008, 2010 and 2012). **P Briggs** served on the programme committees for British HCI (2010, 2011); Global Health (2012, 2013); Pervasive Health (2011); IFIP Trust Management (2010); and Trust (2012, 2013). **Rodgers** led the 'FuturoDesign Laboratory Workshop' for design researchers and practitioners at the invitation of Moscow University of Industry and Finance (2011). **Young** co-organised the 'Intersections' Conference collaborating with Design Council, Dott 2010 and Falmouth University (2010). **Yee** co-Chaired the 1st 'Praxis and Poetics Research Through Design' Conference (2013) at Baltic Centre for Contemporary Art and the 'Design Thinking' Research Symposium 9 (2012). **Holt** organised 'Edwardian Art and its Legacies' at Tate Britain (2012). **Williams** was co-Chair of the D2B2 2nd 'International Design Management Symposium', Tsinghua University, P.R. China.

HEI Consultancies

Cockton was on a professorial appointment panel at Copenhagen University (2009) and provided expert assessments for academic promotion for Indiana and Carnegie Mellon Universities; **Richardson** was professorial referee for Edinburgh (2013); and readership referee Glasgow University (2103); **Yee** was advisor for the establishment PhD in Visual Communication in the School of Art, Design and Media, at Nanyang Technical University, Singapore (2011); **Young** was member of professorial appointment panels at the Universities of Cardiff (2010), Aalto University Helsinki (2011), Lancaster and Loughborough (both 2012).

Scholarly Awards or Fellowships

Borland is Medical Humanities Fellow at Glasgow University; **Light** is a Visiting Researcher at Queen Mary University of London. **Cockton** was NESTA Fellow (2005-2008) on 'Value-Centred Design'; **Richardson** Visiting Research Fellow at the University of Dundee (2007-2010); **Dorsett** Honorary Fellow at Edinburgh University (2012-15). Prize shortlisting included the 2009 Jerwood Drawing Prize for **Bowen**; the 2013 Northern Art Prize for **Tatham** and **O'Sullivan**; and Arts' research was acknowledged with the 'Combined Royal Colleges Medal' in Royal Photographic Society Awards 2011 for applications of photography to medicine.

Invited Keynotes and Lectures (Significant exhibitions and performances are included in REF 2 and REF 5.)

Keynotes/Lectures included **Borland** on 'Imagining Science and Medicine - One Artist's Perspective' (The University of Alberta 2008); **P Briggs** invited address to the 'World Health Summit' (2009); the opening address at the Second International Conference on Privacy, Security and Trust (Canada 2012); and the keynote to the IFIP 'Trust Management' Conference (Morioka, Japan 2010); **Dorsett** on 'Exhibitionary Geographies and the Post-Museum' at the Royal Geographic Society-IBG Annual International Conference (2011); and keynote for the DeSForm

Environment template (REF5)

Conference (Jiangnan University, China 2013); **Light** opening speaker at the FutureLab Seminar on 'Design for Social Justice' at the Participatory Design Conference (Sydney 2010); **Power** on 'Napoleon, Corneille and Theatrical Action' at the 'PSi Performance and Philosophy' Symposium (Helsinki 2011); **Richardson's** 'Some musings on Britishness in art: Englishness Defined' for 'The Great British Art Debate' (Tate Britain 2011); **Rodgers'** keynote at the Design Conference and Seminar (Oslo School of Architecture and Design 2010); and **Young** on 'Design, complexity and the role of empathy in design' 2013 Design Research Conference (IIT Institute of Design Chicago).