Institution: Sheffield Hallam University

Unit of Assessment: 34 Art and Design: History, Practice and Theory

a. Overview

Research in the creative arts submitted to UoA 34 is led and managed by the Art & Design Research Centre (ADRC). The ADRC sits alongside the Communication and Computing Research Centre (CCRC) in the Cultural, Communication and Computing Research Institute (C3RI) and is based in the Faculty of Arts, Computing Engineering and Sciences (ACES). The ADRC leads and manages research in the disciplines of Fine Art, Design and Media Production. Research activity takes place in four broad domains: **creative practices in healthcare**; **advanced making processes and theory**; **social, cultural and philosophical narratives**; **and applied research in digital media.** However, our interdisciplinary and operational approach recognises and enables these boundaries to be permeable as evidenced by outputs cited in REF2. Researchers in ADRC are involved in the development of new methods and techniques for research and their application in the generation of products, designs and works of art that change our understanding or create new knowledge that adds to social, cultural and economic well-being.

b. Research strategy

Our overarching research strategies are consistent, and focus on the origination and generation of ideas and knowledge through practice, reflection and dialogue and its dissemination to other academics, practitioners, end users, commerce and industries. The centre has a commitment to: sustaining growth, ensuring the financial viability, widening the scope and improving the quality of our research base; expanding external research collaboration; and consolidating the core themes by which our work is organised. Progress against key objectives identified in RAE 2008:

i) The promotion and examination of interdisciplinary research and hybrid methods and theory. The hosting of the Design Research Society's International conference 'Undisciplined!' in 2008 was a key initiative in achieving this objective. This initiative was built on through the active recruitment of staff with a variety of experiences, knowledge and skill sets (see c) to facilitate research across a broader spectrum of creative practice and to enable collaboration with other disciplines, experts and sectors. In addition, the ADRC played a substantial role in the instigation, development, leadership and delivery of the EPSRC funded Engineering for Life (EFL) Research Network (EP/H000275; EP/I016473/1 £934K), a collaboration between five of Sheffield Hallam University's (SHU) leading research centres that has had a significant impact on interdisciplinary research across the arts, media, engineering, sports, biosciences and health disciplines (http://research.shu.ac.uk/engineering-for-life/). Notable outcomes from this funding include Westerman2 and Bateman4. EFL helped to identify barriers to interdisciplinary activity through the use of a range of innovative strategies (e.g. idea generator events and research cafes) and methods where, for example, the 'exhibition' has been explored and developed within the ADRC as a method to engage with diverse disciplinary communities, gather data and elicit knowledge from the audience, see Chamberlain1,2&3, Atkinson1, and Hanson2.

ii) The development of large scale research projects and knowledge transfer, allowing post-doctoral and doctoral researchers to work within wider and more sustained agendas than allowed by individual projects.

-Creative practice for healthcare. This strand of research has been conducted under two organisational units within the ADRC: Lab4Living and the User Centred Healthcare Design (UCHD) which is part of the National Collaboration for Leadership in Applied Health Research and Care South Yorkshire (CLAHRC/NIHR). This area of interdisciplinary research has enjoyed a steady growth of activity including: service design (UCHD), public engagement with age related issues in health, Chamberlain1,2,3&4 and issues of teenage exploitation, Heath1 (see also Ref 3b). Applied and fine arts contributions have been made by Cotterrell1&2 (see also REF 3b) and Zellweger1.

-Advanced making processes and theory: The ADRC has a long tradition of making as a method of investigation, as reflected in the works by Zellweger3, and Harrison2. Individual researchers have undertaken investigation into materials and material processes: O'Dubhghaill4, Knight1&2 and Bateman4. Atkinson's research explores Open Design and post-industrial manufacturing (Atkinson1&4). *'Gravity'* and individual research (Wilson1&4, Shaw1) explores the ways in which our relationship with the material world may be altered, compromised or enhanced by digital representation, leading to pedagogical research into the impact of new

technologies in this arena. Other researchers from HEIs and practitioners involved include Jeremy Deller, Martin Boyce and Edmund de Waal. Gravity's current Arts Council England funded project examines the potential of the online exhibition and replication technologies to question notions of materiality.

-Social cultural and philosophical narratives: The tradition of social commentary and critique is a focus in Media Arts and Fine Art, exemplified by the late Breda Beban's work (such as 'My Funeral Song', 2010), which challenged the vocabularies of film-making genres. Research is characterised by an engagement with the pluralism of historical narrative and the contradictory nature of testimony, exemplified by the work of Sprung2&3 and Johnson1. Parallel explorations in Fine Art are demonstrated by the work of Brown4 and Kivland3&4. ADRC was instrumental in the establishment of Sheffield International Documentary Festival (Sheffield Doc/Fest) in 1994 to provide an international forum for debate. Collaboration with Doc/Fest continues, and in 2013 the first Media Arts symposium, 'A Time for Invention' (with attendant screenings), took place in Doc/Fest's schedule.

iii) The development of applied research in digital media: As the range and application of new media has expanded and matured, this field of inquiry has developed since 2008 from an investigation which focused on the potential use of new media and the development/application of enabling technologies (hard and software) towards a critical and creative response to its application across and within a number of different sociocultural, political and economic contexts. This type of investigation is exemplified by Gwilt1,3&4, Petrelli1,3&4, Autogena1&2, and Cotterrell3. Petrelli's FP7 EU funded project (2013-18), meSch (Material encounters with digital cultural heritage) has the goal of designing, developing and deploying tools for the creation of tangible interactive experiences which connect the physical dimension of museums and exhibitions with relevant digital cross-media information in novel ways. Westerman's interdisciplinary inquiry (Westerman2) presents digital data within a poetic narrative and articulates shared agendas between Sport and Art.

iv) Expanding the international reach of research and the development of international collaborations. Collaborations have been achieved through a commitment to supporting clusters of high quality research that has resulted in many staff being invited to deliver keynote presentations internationally. This has led to projects, for example 'Designing Impact!' with Chinese Academy of Fine Art, China; Ioo-lab with Istanbul Technical University, Turkey; engaginaging with Chang Gung University, Taiwan; and Transmission with Southern Methodist University Texas, USA. (See section e for further evidence).

v) Support for mid-career and early career researchers. Four mid-career staff have progressed and been awarded Readerships or Professorships and are submitted in REF 2. In addition we have supported Early Career Researchers (ECR) as evidenced by the inclusion of Harrison, McEntaggart and Wood in REF2. (see section c)

vi) Development of postgraduate student culture increasing student numbers and regional collaboration for research training. We have maintained a steady student cohort since 2008, maintained completion rates and improved the quality of student experience. Partnerships with universities (Birmingham Institute of Art and Design, Coventry University and Leeds Metropolitan.) have been established to enhance research training, supported by a successful AHRC Skills Development award. Wherever possible and appropriate, postgraduate students have more actively been integrated into research projects (see section c students for further evidence).

ADRC Strategic aims for the period 2014-19 are:

- To ensure a sustainable approach to the delivery of research within the centre, to nurture academic research and to extend the dissemination of research to diverse communities at national and international levels. For example, from 2014, Editorship of the Design Journal (Bloomsbury) will come within ADRC, promoting involvement of ADRC staff with a wide external network of contacts.
- To widen staff participation in research, for instance in areas such as fashion and visual communication, via mentoring and targeted funding allocations.
- That research will continue to be underpinned by social inquiry, interdisciplinary engagement and recognition of the role of the arts in problematising accepted social/cultural norms and practices.
- To develop and implement PGR training with a focus on interdisciplinary research and preparing creative practitioners for research in health care. Diversifying methods of

financing studentships through, for example, collaborative Doctoral Awards.

- To extend the centre's network and partnerships with healthcare practitioners, academics and industry regionally, nationally and internationally. Post 2013 Lab4Living activity will focus on research programmes investigating tele-healthcare and evidence-based transformation through the CLARHC2 Yorkshire and Humberside.
- To continue to support high quality research and its dissemination at prestigious international forums that will provide opportunity to extend and formalise international partnerships through collaborative research projects and Knowledge Transfer. SHU has recently secured £6.9 million to develop the UK's first centre of excellence for food engineering, from the Higher Education Funding Council for England (HEFCE) Catalyst Fund. This will draw on ADRC's expertise of research in packaging, sustainability and food waste and innovation in product and packaging design for the food sector.
- To maintain diverse income sources through collaboration with leading HEIs, professional bodies, industry and end user groups.
- To expand work on sustainability and ethical agendas for research across the centre.(see section C.i).
- To develop the impact agenda through greater exploitation of research into industry applied through the Design Futures team (ADRC's Centre for industrial collaboration) and implement mechanisms for tracking and measuring impact
- To promote academic research as a career path through support for mid-career and ECRs. We aim to increase the number of internally promoted Readers and Professors and increase the number of ECR's in our next REF submission.

c. People, including:
i.   Staffing strategy and staff development

The ADRC committee is responsible for strategic leadership, management, staff development and mentorship across research in Art, Design and Media at SHU. The staff strategy is framed by the principles of the '*Concordat to Support the Career Development of Researchers'*, which guides institutional policies and practice. In January 2013, Vitae confirmed that SHU had gained the HR Excellence in Research Award from the European Commission. The University approach focuses on the recruitment, training, retention and career development of research staff within an environment that respects the diversity of all, whilst enabling staff to achieve their potential in contributing to University life. The SHU gender, race and disability equality scheme ensures compliance with all relevant legislation. Alternative working arrangements (e.g. part-time and flexible contracts) are actively promoted. Thirteen of the thirty submitted staff (headcount) are women and thirteen are on fractional contracts. All staff are on permanent contracts, a key factor underpinning a sustainable staffing strategy focused on recruiting and nurturing ECR talent over the long term e.g. Harrison, McEntaggart and Wood. The University's staff development strategy recognises the importance of promoting learning at all stages of the academic career by encouraging staff to share responsibility for their personal and career development. Senior academics and research leaders are key to this approach, setting a culture in which personal development is the norm and advancement is actively promoted, through formal appraisal, mentoring, and informal advice and guidance. The ADRC supports staff in the development and delivery of their research and its dissemination through an annual funding round. This can be used to provide sabbatical cover (e.g. Cotterrell 0.25FTE 2011-13); teaching remission, which has helped deliver outputs (e.g. 60 hours allocated to each; Reeve2, Heath1, and Westerman1&2; travel, production and pump priming for embryo projects (e.g. Kivland1, Knight1 and Petrelli meSch); and other research costs. The ADRC runs a weekly lunchtime seminar series, which all staff members across Fine Art, Design and Media are encouraged to attend. Through a formal programme of presentations, these sessions provide opportunity for senior, ECR and external speakers to present and share their research. Members of the ADRC committee mentor colleagues in preparing internal and external bids, which require documentation of objectives, programmes of work and anticipated outcomes that link with ADRC's strategic objectives. Between 2008 and 2013 more than £0.5m was allocated by the ADRC to seed-fund and support individual staff research, its dissemination and application. This was complemented by financial and administrative support for grant applications and knowledge transfer activities, as well as for annual away days and conferences. In addition, research workshops were held covering issues such as

grant writing, health and safety and ethics, commercialisation and intellectual property. Every active researcher has a mentor, with whom they meet regularly to assess and implement support. This may cover issues such as technical support, PhD supervisor training, peer-reviewed grant applications and the editing of papers. In order to ensure succession and sustainability, we have encouraged staff to undertake research degrees. Eleven of the staff submitted in REF 2 have Doctorates and in 2008 two full-time 'Teaching Researcher' PhD studentships were created in Fine Art. As part of its CPD policy, the faculty will pay the fees of academics wishing to enrol on a part-time research degree at SHU (e.g. Keyte 2012). Since RAE 2008, the ADRC has also invested strategically in the recruitment of four senior researchers: Professor Ian Gwilt, (Visual Communication), Dr Daniela Petrelli (Interaction Design) who was awarded a personal chair in 2012, Lise Autogena, (Reader in Fine Art) and Dr Alison Gwilt (Reader in Sustainable Design). Career development responsibility is shared between SHU and the researcher; institutional structures support development whilst, through the annual appraisal process, researchers are encouraged to identify training and development needs that will achieve objectives and career aspirations. Movement between roles and career paths is encouraged across the institution. This approach has supported the development of existing staff careers e.g. David Cotterrell's to Professor of Fine Art, Dr Paul Atkinson to Professor of Design & Design History and a new readership in media to Esther Johnson. All senior researchers within the Centre have a proportion of time allocated for research and mentorship as part of their work plan. In supporting the Centre's growing status in interdisciplinary research, Dr Soranzo (Psychology) has been integrated into the ADRC research community contributing expertise in visual perception and Craig has been recruited from the University's Faculty of Health and Wellbeing, working with Lab4Living, Design and healthcare. Since RAE 2008, the ADRC has lost five senior researchers: Roddis and Rust through retirement; Corris and Wright to senior posts in the USA and UK; and in 2012 the death of Professor Breda Beban. Accordingly the appointments outlined above have been made to sustain and grow research activity in the ADRC. Initiatives such as the Design4Health, Curated By and Transmission conferences and the Media Arts symposium at DocFest provide opportunities for staff to develop and extend networks. The centre increasingly attracts requests for placements from international researchers and during the census period the centre has been enriched through the hosting of researchers from Turkey, Taiwan, Switzerland, Japan, France including, for example, Kohei Yoshida, Japanese silversmith, a recipient of the Japanese Ministry of Education Fellowship in 2010 (12 months) and Camille Jacquemin, from Ecole Nationale Supérieure des Arts Appliqués et Métiers d'Art (ENSAAMA), FRANCE, a recipient of the European Union Leonardo Da Vinci Scholarship for 6 months in 2013.

Research students
Postgraduate research students (PGRs) are recruited and supported according to strict policies for equal opportunities and best practice, to align with Quality Assurance Agency and UKBA guidelines. Student recruitment, progress and resource issues are managed locally by the C3RI PGR Operations Committee. The C3RI has a Head of Postgraduate Research who is supported by a Postgraduate Research Tutor within each research centre. The University *Policy for Research Student Supervision* adopts a team-based approach to supervision with a Director of Studies supported by one or two second supervisors, with the option of further Advisors. Each team must have minimum of two PhD completions and all PhD supervisors are required to attend appropriate refresher training sessions to update knowledge in line with external and internal developments and to share best practice. In ADRC, ten academics are currently active as Directors of Study (7 are submitted) and a further seven are second Supervisors (5 included in REF 2). The supervision capacity in ADRC has been increased by training and mentoring a total of 9 staff during the census period into supervision roles for the first time. Our interdisciplinary approach has also been supported in six projects by bringing in second supervisors from outside ADRC. Student induction into C3RI takes place in October, February and May, to align with our three enrolment points. Student progress is formally monitored at four stages: Approval, Confirmation, Submission and Completion. Statistical information on these is used to monitor Programme Area performance. Approval of research degree programme, at month 3 for FT and 6 for PT students, is assessed by two independent rapporteurs in respect of project themes, methodologies, supervision, training and development needs, research ethics and technical resource requirements. The Confirmation of PhD, at month 12 for FT and 24 for PT students, is a rigorous, independent assessment of the

candidate's ability to succeed at doctoral level. It is based on a 6000 word report, an oral assessment and a verification that all research ethics protocols are in place. Student experience is evaluated by the University's Annual Monitoring exercise and in 2013, SHU participated in the UK Postgraduate Research Experience Survey (PRES). PRES measures student satisfaction on seven scales including supervision, resources, research culture, progress and assessment, rights and responsibilities, research skills and professional development. SHU achieved a 90% student satisfaction score overall with particular strengths in maintaining regular contact with supervisors, opportunities for training outside the academy, responding to feedback and clarity of communication regarding requirements and deadlines. The existence of a vibrant C3RI PGR Staff-Student Committee (which meets each semester) is instrumental in maintaining high levels of student satisfaction. Students also have access to the University Student Services Centre, which offers specialist support for disabled and international students, advice on student wellbeing and career guidance. Doctoral Students and Research Assistants are integrated into and contribute fully to the research community in ADRC. In this census period we have prioritised the formation of clusters of interest, seeking to grow doctoral research within our existing interdisciplinary research projects. For example, four PGR students are pursuing research that contributes to the *Lab4Living* research agenda and a studio community for Fine Art PhD researchers has been established in partnership with *S1 Artspace*. Our next stage is to target PGR recruitment into the emergent research project *Gravity* to contribute to work in advanced making. In addition a new ADRC wide inquiry into the future of the Art School has been initiated by staff in Fine Art which identifies key projects for practice-based PGRs including pedagogic inquiry and studio design. The university has invested in the *Vitae* Researcher Development Planner which is populated with training opportunities as part of a new university wide CPD Portal. PGRs and ECRs can use this to identify how their training needs might be met and also for Personal Development Planning. Generic training in the *Vitae* Researcher Development Framework (RDF) domains of 'Personal Effectiveness', 'Engagement & Impact' and 'Research Governance & Organisation' is offered through the Faculty's *Postgraduate Research Skills and Training Programme* and training in Ethics and Health and Safety is mandatory. The University runs an annual conference with Leeds Metropolitan University focusing on generic training themes such as 'Personal Effectiveness and Networking', 'Collaboration & Team-Working' and 'Ways to Maximise Employability'. PGRs are supported to present their research through exhibition, conferences and seminars nationally and internationally and are encouraged to write up conference papers for publication in journals and conference proceedings. Training in the RDF domain of 'Knowledge & Intellectual Abilities' is led by the PGR Tutor for Art & Design in a workshop programme, focused on the development of practice-led research projects. ADRC has a long-standing PGR training partnership with Birmingham Institute of Art & Design (BIAD), Coventry University & Nottingham Trent University. We are planning to hold an annual conference examining key challenges for research students across art and design, for example one around method. In 2012 this consortium was awarded an AHRC Skills Development Award (Knowledge Exchange in Design, £40K), which funded PhD students to undertake five-day residencies with a broad range of commercial and cultural organisations across the UK. International collaborative research opportunities in Fine Art have been offered by the Berlin based residency programme LoBe (www.lo-be.net). The C3RI is a partner in an AHRC Centre for Doctoral Training (CDT) in the area of 'Heritage' (led by the University of Hull). The consortium has provision for 26 full-time studentships between 2014 and 2018. Students will receive specialist, cohort-based training and have the opportunity to experience internships and mentorship with non-HEI partners. We will continue to build upon existing partnerships with organisations in the city and in the wider region, looking for industrial partners to provide production sites and access to professional contexts. In the census period, ADRC secured four RCUK full-time PhD studentships, three in Fine Art/Museum Studies (in Open Competition) and one, in Design, as part of the AHRC BGP: Capacity Building award. Two full-time PhD studentships in Design were sponsored within the CLAHRC/NIHR framework. We plan to build upon the centre's research expertise in Design & Health by seeking opportunities for matched PhD bursaries in the health care sector.

d. Income, infrastructure and facilities

Income & Infrastructure : The research environment is sustained through the management of a mixed portfolio of funding ranging from HEFCE QR, Research Council UK £1.3m, Regional government £843k, European Union £476k, Industry, Charities £57k, and the University's

strategic investment fund (HEIF). This portfolio of funding supports a range of activities including for example funding for embryo research notions to the appointment of new research staff.

Notable external funding successes gained in this census period include the AHRC which supported a range of outputs (for example Reeve2, GwiltI4, O'Dubhghaill1&2), the EPSRC (Chamberlain Co.I) Engineering for Life, The Arts Council (Reeve, Cotterell), the British Academy (Atkinson2), the British Council (Chamberlain2), the Wellcome Trust (Cotterrell1), the Leverhulme (Cotterrell, Johnson), and the Health Foundation (Langley4). The ADRC has also secured industrial support for research e.g. Vitra (Chamberlain1), Heinz (Yoxall3), Trulife (Dulake1&3) as well as sponsorship from regional inward investment organisations such as Creative Sheffield (Design4Health conference). Our strategy to develop larger-scale research has assisted with the targeting, securing and managing of significant project budgets, with academic, professional and industrial partners. These include £1.2m 'User Centred Healthcare Design' with Healthcare partners across South Yorkshire (CLARHC/NIHR); 6m euro, meSch project with European partners (see e) (EU 2013-18); £490k, 'Future Bathroom' with Ideal Standard (EPSRC); and £184k, 'Head Up' with Sheffield Institute for Translational Neuroscience SITraN (NIHR 2012-14).

The ADRC committee ensures appropriate funding is targeted to support and meet objectives of the centre and a formal monitoring system is implemented to track funding bids and outcomes. Administrative support for the ADRC is provided by the C3RI admin team (6.8FTE), whose duties include the preparation and submission of grant applications, projects and events, servicing committees, disseminating research opportunities, financial management and support for PGRs and supervisors. The ADRC also employs a research associate responsible for publications and events (0.5FTE). RIO (16.2 dedicated FTE) also provides additional support and expertise in relation to external research funding, contracts, intellectual property and staff development, and also holds an extensive database of funding opportunities. All external funding bids are signed off by the head of the ADRC, head of faculty finance and head of faculty. Project start-up meetings provide administrative, financial and management assistance for all new research projects, ensuring a robust infrastructure for delivery. All project leaders are supported through the C3RI Project Monitoring Group that meets quarterly to track progress and identify barriers to delivery. The C3RI Ethics and Health and Safety Committees address local issues and links with the overarching SHU policies and reviews academics' and postgraduates' project plans, ensuring appropriate approvals are obtained and checks carried out.

Facilities In 2008 ADRC was relocated to the City Campus and was housed in the £26m Cantor building which received a commendation as Best Building using Sustainable Technologies in the 2012 Sheffield Design Awards. This new location has enhanced opportunities for interdisciplinary collaboration and now provides one of the largest facilities in the UK for UG/PG teaching and research in Art and Design. The formation of the ACES faculty (2007 to date) saw a significant investment in facilities, workshops, studios, computer suites and engineering laboratories all available for research. The faculty houses excellent analogue and digital media support with photographic darkrooms and studios, Apple & PC IT labs, video/sound edit, animation suites, a performance studio with sound editing and set building facilities as well as TV and radio studio facilities all supported with professional software. Manufacturing and prototyping facilities include precision manufacturing, structural integrity / materials testing, micro structural analysis, gas and electric welding (MIG & TIG), casting facilities for metal, plaster & resins, paint spraying and finishing techniques. There are facilities for fine metalworking: soldering, spinning, jewellery making and silversmithing as well as vacuum forming, laser cutting, 3D rapid prototyping and 3D printing, CNC routing and machining. In addition to these fixed facilities, the ADRC has portable equipment for researchers to use in the field, ranging from Apple MacBook Pro laptops to Spherical Digital Video cameras. Researchers also have access to healthcare simulation suites; sports science facilities; dedicated studios; and labs possessing extensive resources including motion capture, simulation, production, measurement and data collection equipment. These studios provide a state-of-the-art experimental area where it is possible to conduct both qualitative and quantitative studies of human behaviour and to understand individuals' interactions with the built environment. All of the above are supported by the faculty cohort of technicians with expertise ranging from Avid editing to rapid-prototyping and exhibition fabrication. Dissemination of research is also facilitated through the Sheffield Institute of Arts Gallery, a public display space used for testing new propositions as well as holding international exhibitions. The learning centre integrates

quality academic library information resources in electronic and hardcopy format with excellent IT facilities in a range of different learning environments to meet the varied needs of students and researchers. Twenty-four hour opening during semester allows convenient access to print and media resources and to study facilities. A fast and effective Document Supply Service obtains items for researchers which are not held in the University's collections. In addition a specialist Visual Resources studio is available for staff, students and researchers using and creating images, and photographing their own work. Expert help in sourcing and using information resources and information literacy skills training are provided by Information Specialists and their Faculty support teams. Learning centre Helpdesks bring together a wide range of services, including information enquiries and twenty-four hour IT support, designed to enhance the experience of using the learning centres. Staff research is deposited on SHURA, the University's open access archive.

e. Collaboration and contribution to the discipline or research base
Joint research projects: Large scale funded projects have established collaborations with diverse partners for example; UCHD/CLARHC(NIHR) which has included collaboration with healthcare providers across South Yorkshire (including **Sheffield Teaching Hospitals NHS Foundation Trust, Regional hospitals, Regional councils**) and has explored opportunities for Design in healthcare. Through a competitive NIHR funding bid (CLARHC2) has established a formal partnership between Lab4Living and the **Sheffield School of Health and Related Research (ScHARR) University of Sheffield** and the **Bradford Institute for Health Research, Bradford Royal Infirmary,** and extends health collaborations across Yorkshire and Humberside.
meSch (EU), led by Petrelli, explores the co-design of novel platforms for the creation of tangible exhibits at European heritage sites, with partners including the **University of Limerick, WAAG Society Netherlands, University of Strathclyde, eCTRL solutions Italy, Den Foundation Netherlands, University of Stuttgart, University of Carlos 111 Madrid Spain, Museo Stoico Italiano della Guerra Italy, University of Amsterdam** / **Allard Pierson Museum Meseon NethFondazione Bruno Kessler (FBK)**. The NIHR funded 'Head Up', an on-going, project explores design methods for alternative neck collar braces in collaboration with **Sheffield Institute for Translational Neuroscience**

International collaborations: Thematic research constructs have provided opportunities for meaningful international collaborations and include for example **China Academy of Fine Art** (CAFA) which led to the joint publication of practice led research (Atkinson (Ed.) (2011) *Designing Impact! Approaches to Applied Research,* Foreign Languages Press, Beijing (ISBN971-0-95683366-2). Following the collaborative publication of Designing Impact! and keynote presentations at the Guangdong Industrial Design Week 2012 (Chamberlain, Phillips, Roddis), the Chinese Government, through the officers of the **Chinese Household Appliances Research Institute** (CHEARI), have invited ADRC to develop CPD training for Chinese industry and to contribute to the development of industry standards for household appliances. *Transmission* (http://www.transmission.uk.com/) has engendered debate and engagement between academic Fine Art research and professional practice agendas, maturing to host an international conference and establish an annual peer-reviewed publication in collaboration with **Southern Methodist University, Texas** (now in its third edition). *Topographies of the Obsolete* is a collaborative project in partnership with **Bergan Academy of Art**, the **British Ceramics Biennial** and partner universities in Denmark, Germany and the UK (Brown4).

Industrial collaboration: The centre's applied approach to research and KT activity through Design Futures has enabled opportunities for collaborative research with industry. For example **Ideal Standard, Vitra** (Chamberlain1), **Unilever** (Dulake4), TruLife (Dulake1&3) and **Heinz** (Yoxall3).

Dissemination of high quality research: Keynote lectures actively support the centre's strategy to develop international links through the promotion of our research and networking. Examples include: (Atkinson) Business & Design Lab, Gothenburg, 2011, Salone Internazionale del Mobile 2011, Milan, International Symposium on Interactive Design, Beijing, 2010, (Un)Limited Design Symposium, Amsterdam, 2010, General Assembly of Danish Designers, 2009, (Chamberlain) Tsinghau University Summit Conference, Beijing, China 2010, Guangdong Industrial Design Week, China 2010, Greenbridge Conference, Cambridge University 2010, SIM Conference, Portugal

2011, Health Services Research network Annual Symposium, UK. 2012, (Cotterrell) Turquoise Mountain Foundation, Kabul, 2008, VAGA Symposium, Tate Modern 2009, Association of Medical Humanities Conference, Tate St Ives, 2010, (Craig) European Network of Occupational Therapists in HE, Vilnius, 2012, International Congress of Spirituality and Ageing, Edinburgh, 2012, National Congress of Psychiatry and Psychotherapy, Lisbon, 2009, Technology in Dementia Care Conference, Birmingham, 2009, (Johnson) Revolutionaries Conference, Canterbury Christ Church University, 2012, (Kivland) Childhood and Creativity, Freud Museum, London, 2010, Making Space, Slade School of Fine Art, 2012, (Yoxall) Accessible Design Symposium, Bangkok, 2012, CUWAAT, Cambridge University, 2012, Europack Cannes 2012, (Zellweger) World Crafts Council, Mons, Belgium, 2008.

External PhD examiner roles: Chamberlain - Cambridge University (2011), University of Dundee, National University of Ireland (2012); Atkinson - Glasgow Caledonian University, Oslo School of Architecture (2012), Loughborough University (2013); Yoxall - Loughborough University, Cambridge University (2012); Cotterrell - University of West of England (2013) Gwilt, I - University of Technology Sydney (2012), University of Canberra (2013), Shaw - University of Northumbria (2008) Anglia Ruskin University (2010).

Numerous research staff within the ADRC are internationally recognised within their disciplines, as evidenced through awards, prizes and invitations to join competition juries. Examples include:

Jury member roles: (Cotterrell 2008-11) Cambridge Commissioning Program, Head of Selection Panel, (Bateman 2009-date) Designers Institute of New Zealand, Auckland, (Chamberlain 2010), International Bicycle Design Competition, Taiwan, (O'Dubhghaill 2008-9), National Craft Awards, Ireland, (Heath 2011) No Limits Film Festival, (Kivland 2009-10) Oskar Cepan Awards Slovak Republic, (Bateman 2008) Waitakere City Business Awards, Auckland (Zellweger) Dutch Design Award, Eindhoven 2009, 2011. Swiss Federal Commission for Design 2008-10, Talente, Germany 2009 (Gwilt, A) Global Award for Sustainable Fashion, 2013, International Sustainable Apparel Coalition 'Higg Index', 2013.

Awards: (Chamberlain) Art on Chairs International Design Competition Winner, Parades, Portugal, 2012, (Bateman) Sustainable Habitat Challenge, Auckland, Commendation, 2009, (Cotterrell) Philip Leverhulme Prize for Research 2010, Artraker Award 2013, (Craig) Fellowship Award for Outstanding Contribution to the Profession, 2012, ROMPA Quality of Life Award, 2010, (Heath) National Film Board of Canada Cross Media Challenge Award, 2008, Atlantic Film Festival International Competition, Selection, 2008, New Zealand Film Commission Script Development Award, (Johnson) Philip Leverhulme Prize for Performing and Visual Arts, 2012, (Soranzo) Best Illusion of the Year, Vision Sciences Society of America 2013.

ADRC staff influence the development of discourse within their disciplines through a wide range of positions held on international committees, panels and advisory boards, editorial and editorial board roles for academic journals, membership of peer review panels for grant awarding bodies and other activities. Examples include:

Organisational role in International Conferences: (Gwilt,I), Creativity & Cognition, Sydney 2013, (Bateman) Cumulus Aotearoa, Auckland 2009, EDULearn10 Barcelona 2010, Inted 2010 Valencia, (Atkinson) EAD 2013 Gothenburg, ICDHS 2010 Brussels, ICDHS 2012 Sao Paulo.

Committee Membership roles: (Cotterrell) Creative and Cultural Skills Council, Steering Group, 2008-11, Design and Artists Copyright Society 2009-date, AIR Council 2005-date, (Gwilt,I) Design Research Society, Executive Board, 2011-date, (Atkinson), Chair European Academy of Design, International Committee for Design Histories and Studies, Executive Committee 2004-date, (Yoxall) European Committee for Standardisation, CEN15945 UK Representative 2011, International Organization for Standards ISO17480 UK Representative 2011, (Wilson) Art House Foundation London (chair of trustees 2008-date).

Editorial Board roles: (Atkinson) The Design Journal, Co-Editor 2009-date, Advisory Board 2000-9, Interiors, Advisory Board, 2009-date, Journal of Design History, Editorial Board, 2002-9, (Gwilt,I) International Journal of Design Creativity Editorial Board, 2012-date.

International Advisory Board roles: (Atkinson) Computer History Museum, San Francisco, 2010-2011, Premsela.Org, Amsterdam, 2010-12.

Peer Review Panel memberships: (Atkinson) AHRC Peer Review Panel 2006-9, FCT Ministry of Technology, Portugal 2012, (Chamberlain) FCT Ministry of Technology, Portugal 2010-12, Qatar Foundation for Education, Science and Community Development, 2010-11.