

Institution: Sheffield Hallam University Unit of Assessment: UOA32 - Art and Design: History, Practice and Theory

### 1. Unit context and structure, research and impact strategy

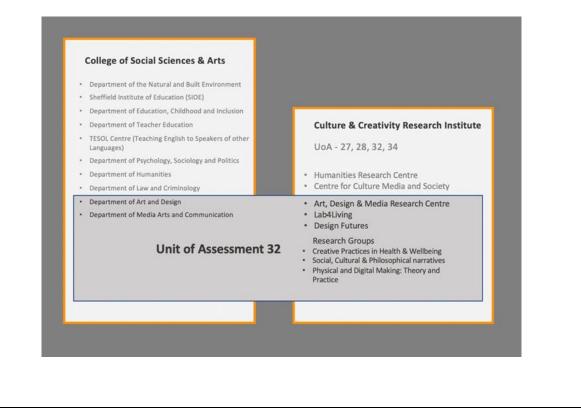
## **Context and Structure**

Over the last 25 years the Art and Design Research Centre (ADRC) has nurtured quality research by both staff and doctoral students - by developing and supporting individual researchers, and by fostering collaborative and interdisciplinary projects. Research has focused on addressing challenges across domains - from the reconstruction of post-industrial regions, to voicing the under-represented nationally and internationally, to processes and practices that impact on everyday living.

Progress during this period is evidenced through the scale and scope of the submitted outputs, the increase in the development of Professors and Readers through the unit's mentorship scheme, and research income which has grown from £2.7m to £7.9m.

During this census period there have been significant changes in research structures and management across the university, but throughout the ADRC has remained a core unit of the university's research environment. The Lab4Living (L4L) initiative, noted in REF2014, has developed through ADRC's strategic focus on Creative Practice in Health and Wellbeing, resulting in its formalisation as a strategic research centre within the new university structures, and evidenced by a £4m award through Research England's Expanding Excellence in England (E3) scheme. Lab4Living is now led independently, but aligned with the ADRC, and together they constitute the submission for UoA32.

The detail of the organisational changes across the university is explained in section 3 and in the Institutional Statement, while the local structure is illustrated below.





From academic year 2020/21, ADRC will add Media into its title - becoming the Art, Design and Media Research Centre (ADMRC). This recognises the increasing contribution of researchers from that discipline to the standing of the centre for over 25 years.

# **Strategy: Progress Against Objectives**

Our research strategy remains consistent with our 2014 submission and focuses on the origination and generation of ideas and knowledge through practice, reflection and dialogue. We remain committed to the dissemination of research to a wide community of stakeholders, including academics, cultural and commercial industries, end-users, governmental and non-governmental organisations, and practitioners.

We have made significant progress against all of the objectives identified in our 2014 submission, and in many cases exceeded expectations. Achievements include:

- **extending the dissemination of research** to diverse communities at international and national level (e.g. Lab4Living through the Design4Health conference/journal);
- widening staff participation in research (leading the CHEAD initiative on Graphic Design Research and including Visual Communication staff in our submission);
- **developing and delivering PGR training** with a focus on interdisciplinarity (e.g. Method and Impact conferences, and core to Lab4Living's E3 award);
- extending networks and partnerships with healthcare, practitioners, academics and industry (evidenced by Lab4Living's engagement with the NIHR's Collaboration and Leadership in Applied Health Research and Care (CLAHRC) programme and the Research England E3 award);
- further **developing our impact agenda** through greater exploitation of research outside academia, in collaboration with our knowledge transfer arm of the unit (Design Futures);
- formalising partnerships through collaborative research and knowledge transfer projects (increase in collaborative funding awards and substantial increase in KTP projects);
- maintaining diverse income sources (see section 3);
- promotion of sustainable and ethical approaches to/for research (Life-Saving Lullabies/O3877 and Ebola/O2972), greater exploitation of research for industry (recognised by Design Futures Packaging Awards and Lab4Living ICS), and the promotion of the Academic Career Framework (see section 2).

Our research has influenced the shaping of the university's three research and impact platforms: Enabling Healthier Lives, Driving Future Economies and Building Stronger Communities. Also our strategy is congruent with the UK GCRF international strategy 'to transform lives through the creation of knowledge that generates social, economic and cultural benefits, working with others to ensure those benefits are wide-reaching'.

### **Research Groups: Activities and Forward Strategy**

As noted in our 2014 submission, research activity was conducted within and across four broad groups, which 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. Whilst there have been nominal changes, the overarching strategy remains the same. Over this census period we have mapped, developed and extended our research and international profile in: Creative Practices in Health and Wellbeing; Social, Cultural and Philosophical Narratives; and combined two groups into Physical and Digital Making: Theory and Practice. These areas of enquiry are permeable and do not represent strict manifestos. They are rather fora for the sharing of knowledge and the testing of new propositions within and across domains, as seen through the outputs documented in REF2. Areas of enquiry vary in scale from lone scholar to clusters and have all produced notable outcomes over the census period. These research groups are supported, where appropriate, by Design Futures.



Researchers who contribute to **Creative Practices in Health and Wellbeing** (formerly titled Creative Practices in Healthcare) through our Lab4Living group, led by Chamberlain and Craig, successfully submitted to the Research England's E3 scheme and in 2019 gained a £4 million award, matched by the University, for a research programme exploring the re-conceptualisation of the 100-Year Life and Future Home. The research aligns to the UK Industrial Strategy and the United Nations 2030 Agenda for Sustainable Development. This award has facilitated the employment of a Professor (Lloyd-Jones), two Readers (Koski and Tan Koon Boon), six RAs and 12 PhDs to deliver the three-year research programme. This significant endorsement reflects the momentum of an area that has developed a critical mass of research-intensive staff and ambitious projects through this census period.

Research has and continues to challenge for example: healthcare paradigms such as the geographical shift of care (HOSPITAbLe/O3901), the impact of the environment on our wellbeing through the redevelopment of the Rail Park in Pensyvania (Beacon/O3958), healthcare training in breaking bad news (Human Simulation/O3962), health products to enhance dignity exemplified by a bra for women undergoing breast cancer treatment (Support4All/O3986), and policy where research has been adopted by Alzheimers Scotland (Journeying Through Dementia/O2910). Codesign is integral to much of the work within the group (e.g. Starworks/O3801) - bringing together academia, industry, the NHS, and children and their families - to address market failure issues for child prosthetics. This research is referenced in Nature journal and is cited by Involve (NIHR) as an exemplar of how to undertake co-production.

The establishment of the biennial International Design4Health conference, the Design for Health journal (Taylor & Francis), and delivery of a wide portfolio of research and consultancy projects, has facilitated a substantial growth in the reputation, capacity and ambition of this area. Besides the outputs in REF2 and the Lab4Living ICS (ICS3), significant achievements have been made by individuals who contribute to Lab4Living, showing the penetration of this group of researchers into the domain of creative practices for health and wellbeing. For example, Langley was the first non-medical recipient of a three-year NIHR Knowledge Mobilisation Research Fellowship.

**During the next census period** we aim to increase the impact of our research in health, building on four existing interrelated themes of enquiry, fully aligned to the WHO Global Strategy on Ageing and the United Nations 2030 Agenda for Sustainable Development. These are: *Health Inequalities* in developing frugal design innovations to support communities with high socio-economic need in the UK and the developing world (Craig, Lloyd-Jones, Reed, Swann); *Industry, Innovation and Infrastructure* building on research on the future home (Chamberlain, Reed), developing age-inclusive, affordable products and environments that support ageing through the life-course; *Sustainable Cities and Communities*, including soil health (Koski, Lloyd-Jones) and SMART technology (Chamberlain, Dulake), the latter exploring the use of design in creating healthy connected communities; *Creative Practice as Knowledge Mobilisation* (Langley, Tan) continuing to advance design and creative practice in building multi-sectoral partnerships through which to share knowledge, expertise and resources. Emphasis will be placed on the advancement of Lab4Living's Design4Health global network, to extend the reach and impact of this work and upskill future generations of design researchers.

Research conducted in the **Social, Cultural and Philosophical Narratives** group continues the tradition of social commentary and critique through two new themes, identified through mapping, which have gained momentum and pace over the census period.

The *Repositioning of Archives* theme has developed to elicit new meanings and challenge audiences to critically engage with the past and its resonance for the present. Developing research in this area aims to reveal alternative social histories; provoke new perspectives on class, marginalised communities, gender stereotypes; and contest official histories. Exemplar enquiries in this theme include: issues of migration in 20th century Europe in relation to questions of culture and identity (We Are All Migrants/O2915), developed as part of a collaborative project at Utrecht University and later disseminated through HERA (Humanities in the European Research Area); the use of rare archive film to tell the story of what happened to an English town during the First

World War (Asunder/O2942); and exploration of historically omitted intersectional identities to highlight the work of gay socialist activist writer Edward Carpenter (Querying Queer History/O3970).

**During the next census period** new research includes: Heath's current collaboration with City University of New York, 'The Constant Sinner', looks at the legacy of Mae West as champion of women's empowerment, tolerance and freedom of expression. British Council supported 'Dust & Metal' (Bui và Kim Ioại) by Johnson lays new ground for the reimagining of, and accessibility to, rare international heritage film, sharing never-before-digitised archive materials between Vietnam and the UK. Petrelli's 'Polyvocal Interpretation of Contested Colonial Heritage' investigates the decolonisation of audiovisual archives in Europe.

This community of researchers has been strengthened through Cotterrell's GCRF-funded project *Empathy & Risk*. This interdisciplinary initiative addresses issues of systemic failure in contexts of contemporary global crises. The project has fostered the development of a series of sustained international partnerships and facilitated the realisation of a wide range of precedents for policy interventions within multidisciplinary contexts, including the World Conference on Statelessness (Netherlands), Human Rights Arts Festival (Sri Lanka) and Ubumuntu Festival (Rwanda). *Empathy & Risk* has been acknowledged by the University as an area of strategic growth and in 2019 was formally constituted as an interdisciplinary research cluster, including experienced and emerging researchers (Autogena, Butler, Cotterrell, Johnson; in addition to external partners from film, theatre, visual art, law, sociology and conflict studies). Research in this cluster builds on established strengths that forefront perspectives and co-production in the framing of international, national and institutional responses to global challenges, and the capacity of research in the arts to effectively influence policy development.

This research group has produced exemplar outputs underpinning two of the ICSs from this period: Autogena's 'Kuannersuit; Kvanefjeld'/O3936 (ICS1), and Heath's 'From Scotland with Love'/O2914 (ICS2).

There has been a diverse range of outputs within the new research group **Physical and Digital Making**: **Theory and Practice** (formerly Advanced Making Processes and Theory), including the *Digital Materiality Lab*, which has emerged from applied research in digital media (REF2014); and recent research that forefronts *Frugal Making*, sustainably addressing issues recognised as global challenges, as well as national and sectoral challenges.

Since REF2014, applied research in the *Digital Materiality Lab* has developed a Digital Heritage strand, supported by projects led by Petrelli (as PI or Co-I), worth over £1.6 million and funded by the EU, AHRC, KT and consultancies. These projects developed a network with national and international institutions: English Heritage and the National Trust in the UK, three UNESCO sites in Italy, and national museums in Italy and the Netherlands. The EU-funded meSch project/O3881, which aimed to co-design novel platforms for the creation of tangible exhibits at heritage sites, offering visitors new interactive experiences, received the accolade of Innovation for Cultural Heritage by the EU in 2018 and influenced the museology digitisation strategies of the Italian Government (Department of Cultural Heritage) in 2019. meSch outcomes also include a spin-out company in Germany (ThingsIO) and business innovation in Italy (Suggesto srl.).

**During the next census period** the Lab will investigate the materiality of the digital, or digital materiality, and the phygital as raw material - aiming to create new expressions of identity. This research is being developed by Petrelli, Dulake, Zellweger and Koulidou and includes collaboration with Milano Politechnico and the University of Cambridge on the making of digital-material hybrids and materialisation of personal data as new expressions of identity and personal meaning.

*Frugal Making* is an area of enquiry responding to the vacillations of global economic, social, environmental and technological imperatives - seeking to bring together academics united through their application of creativity, critical thinking, complex problem-solving and modalities of intelligent



making. This multi-disciplinary community of interest offers a critical space for practitioners and theoreticians from Fine Art, Jewellery, Design and Digital applications. Research outputs include bodies of work (Cigar Box Guitars/O3790), curated exhibitions (Hybrid Display Structures/O3863), artefacts (Domesticated/O2975, Copy/O3984, Calendar/O2973) and product development (Support4All/O3986, Ebola/O2972). The group has created notable outputs that support the GCRF international strategy, adopting nuanced making approaches for alternate cultural contexts (Making Links/O3903, Life Saving Lullabies/O3877). Further confirmed GCRF funding will continue the work of this theme through the next census period.

**Design Futures** (DF), established in 1997 and the first non-STEM CIC (Centre for Industrial Collaboration), continues as the Knowledge Transfer (KT) arm of the unit, overlapping the research groups outlined above. Over this census period DF has worked with regional, national and international companies and has delivered Innovate UK funded programmes and Knowledge Transfer Partnerships. An established strategy of the unit and university has been to support the economic development and sustainability of the region through R&D. ESIF/ERDF and GB funding established the 'Sheffield Innovation Programme' (SIP), a regional initiative which aims to stimulate business growth and promote the development of long-term relationships with SMEs through research and innovation-based consultancy. Since 2014, DF has engaged with 258 SMEs/organisations, generating 356 new products to market. More recently DF has contributed to the new initiative 'ScaleUp 360' (part of the Northern Powerhouse strategy to support entrepreneurs and start-ups in the region), delivering 25 projects and currently working on a further 15. Concurrent with the above, DF hosts a range of annual internships for our own and international students, some progressing as Research Assistants within the unit.

This census period has seen a growth in **KT-funded projects** (seven in the census period). Examples include a patented medical-grade wearable health monitor with a Cambridge tech company, funded through a major IoT award, and the design of horse transporters with a regional company for the US export market. Both projects were assessed as outstanding by the funders Innovate UK. In addition, DF staff have been strategically named on externally-funded research projects. These include (NIV mask/O3987) and (Support4All/O3986), funded by NIHR i4i, and NESTORE (Thinking Through Things/O3902) and (meSch/O3881), funded through Horizon 2020 - where their skills and expertise have maximised opportunities for the application and commercialisation of research.

Broader forward-looking strategies other than those embedded in the groups include:

- Development of those new to research to attain Significant Responsibility for Research (SRfR) through the new Performance and Development Review (PDR) and unit mentorship process.
- Increase PhD completions across the unit.
- Cross-university and external collaborations to support new large-scale funding bids, for example Advanced Wellbeing and Lab4Living, Social Policy, and Empathy & Risk.
- The development of formal international collaborations to support the research groups, as exemplified by the Design4Health Global Network.
- The relocation of the Arts Catalyst from London to Sheffield presents a unique opportunity to develop strategic partnerships. A senior research fellow will be appointed to support this partnership, focused on developing overlapping research inquiries in relation to the research groups within the unit.
- Contribution to the academy through further dissemination of research, and the development and delivery of materials and training in preparing researchers working in the field of Design and Health.
- Informing postgraduate curriculum development in the discipline of Design and Health.
- Reflect on and refine support and initiatives to maximise impact.

### Facilitating the Achievement of Impact

The unit has delivered against each of the strategic objectives noted in REF2014:

- further extend our maturing approach to impact in Design across to Fine Art and Media;
- adopt a more pro-active approach to the use of social media and the ADRC website to help forge new collaborations and draw attention to impact activities;
- embed impact as a formal part of PGR training;
- extend opportunity for impact within healthcare through the five year NIHR CLAHRC Y&H programme, establishing links with industry, practitioners and patients.

ICSs submitted from Fine Art (enabling dialogue on the risks of uranium mining in Greenland/ICS1), Media (how film acted as a cultural touchstone, enriching lives in diverse communities, From Scotland with Love/ICS2) and Design (enhancing dignity and quality of life for individuals with long-term conditions through products and policy, Lab4Living/ICS3) grounds the strategy to support and facilitate impact, as noted in REF2014. The embedding of impact in PGR training is noted in section 2. In support of this strategy, an Impact Blog was created in 2015 (https://blogs.shu.ac.uk/c3riimpact/). This is consistent with the University's mission of ensuring areas of research contribute to the knowledge economy, whilst having a positive impact on quality of life for diverse and disadvantaged communities (see Institutional Statement). The unit's leadership group ensures quality, rigour and ethics compliance; determines research policy issues; allocates internal research funds; and facilitates direct and indirect mentoring of staff.

Through these activities the unit supports staff in accruing and developing impact from research outputs and attaining outwardly-facing positions on juries, peer review panels and advisory boards, where they help frame their individual disciplines. The ongoing strategy has been developed and refined through reflecting on and responding to the REF2014 outcomes and the guidance for this exercise. In 2015, a dedicated researcher was appointed to support the unit's impact agenda (see section 3).

More broadly the unit provides support through: purchasing equipment; short secondments and translation fees; teaching release; travel, accommodation, and payment of conference fees and workshop participation.

Impact has been facilitated through a range of supportive initiatives that include: flexible working arrangements (Heath), purchasing of specialist equipment to undertake field research (Autogena), and IP and licensing support (Lab4Living). Funding has strategically been allocated through the ADRC for travel and production (Heath, Autogena) and through the university's Creating Knowledge investment fund, for example the Impact Fellowship (Autogena) and Strategic Funding (Lab4Living), Empathy & Risk). Competitive external funding has supported impact (Heath, Lab4Living), and strategic partnerships - such as Arts Catalyst (Autogena), Sheffield Institute for Translational Neuroscience, Marie Curie and TalarMade (Lab4Living) - have been key in maximising it. Co-creation and interdisciplinarity have been adopted for much research across the unit. Engagement with end users, disciplinary experts, policy makers and industry, and developing fora for collaboration early in the research process, has been a strategy to enhance the impact of research.

### Interdisciplinary Research

Interdisciplinary research has been fostered by the unit since the mid-nineties and the outcomes of this are exemplified by the Research England E3 award. This was underpinned by a body of interdisciplinary research which began with Chamberlain's inquiry into tools for the care and education of children with severe sensory disabilities in 2000. More recently Swann's *Life-Saving Lullabies*/O3877 (Design and Education), Autogena's *Vindskaber*/O3931 (Fine Art, Computer Science and Atmospheric Science), and Cotterrell's *Thought Curfew*/O3871 (Fine Art and Theatre) are fundamental in underpinning the unit's research groups.

Lab4Living has established wide-reaching pathways to support collaborative networks and the dissemination of research through its International Design4Health conference, the Design for Health Journal and the Design4Health Global Network. These mechanisms enable



interdisciplinary research communities to come together to find a shared language to articulate research that transcends boundaries. The unit demonstrates the value of integrating knowledge from diverse fields to enquire into complex societal issues, e.g. Craig's work in design and dementia, death and dying (Life Café/O3878) and Journeying Through Dementia (O2910). Tools developed to support interdisciplinary working, such as *Initiate Collaborate* (Craig, Chamberlain), have been adopted by the Ministry of Social Development, New Zealand. Researchers within the unit engage in, promote and interrogate what is meant by interdisciplinary and transdisciplinary research. Langley's research, for example, is cited by NIHR Involve as best practice in co-production in transdisciplinary research.

The unit's commitment to interdisciplinarity is evidenced by the recent appointment of Lloyd-Jones, whose post-disciplinary research forges collaborations between seemingly unrelated fields.

# Open Research

Researchers within the unit subscribe to the principle that research data is a valuable asset and support the principles, set out in the Concordat on Open Research Data, which recognise that research data should, wherever possible, be made openly available for use by others; consistent with relevant legal, ethical, disciplinary and regulatory frameworks and norms. ADRC and Lab4Living follow the University guidelines with respect to Open Research, having a representative (Atkinson) on the cross-university Open Research Operations Group. This has been invaluable in ensuring Open Access and Research Data Management (RDM) policies have been developed, along with 'Elements', the new research repository software system, to take into account the particular requirements of art, design and media practice outputs and are not focused purely on textual outputs. Consequently, the repository now accepts stills and videos to allow images of three-dimensional artworks and exhibitions to be deposited, alongside documentary film and moving image artworks. With respect to RDM, space has also been provided within the university to store physical artefacts, where necessary, alongside the usual digital dataset storage. Through the Open Research Operations Group, Atkinson is also involved in the development of a network of Open Research Champions, which trains selected staff (especially ECRs) to widely promote the principles of Open Research to staff. Central funds are available for any fees involved in making published work open to all, for example through Gold Open Access routes, and these have been successfully accessed by staff within the ADRC. However, it was recognised by the centre that Open Access remains challenging for practice-based research outputs, where both the research methods and outcomes cannot be fully illuminated through textual commentary. It was for this reason that the centre championed an Impact Blog over four years ago and developed the method for digitally submitting our research outputs to this REF, so that it can later form the basis of a fully open art, design and media research archive.

# **Research Integrity**

Our research addresses the quality of the research process, and maintaining standards of integrity, impartiality and respect for data, in line with university policy (see Institutional Statement), is essential. Much of the research conducted by the unit involves the participation of volunteers, often from the general public, and some necessarily involves groups of vulnerable people. Rigorously applying the ethics policy ensures that participants' interests are put first at all times and that researchers do everything possible to fully inform people who have consented to take part, and to ensure that care is always taken to provide confidentiality and anonymity. A risk assessment approach is encouraged, to safeguard the physical and psychological wellbeing of participants and researchers.

All research at the university undergoes ethical scrutiny, to ensure it is conducted to the highest standards and to protect the integrity of our research. Sheffield Hallam's research ethics policy is constantly reviewed to ensure that these high standards are met. Staff within the unit access and subscribe to a university-wide comprehensive governance system (including regularly reviewed and updated policies for research ethics, storage of data, GDPR, and health and safety). Staff are supported locally through the CCRI Research Ethics Committee and through regular project start-



up and monitoring group meetings. A programme of staff development utilising Epigeum online training is available to all staff and provides courses on conducting ethical research. The university now has 510 researchers who serve as ethics reviewers. It was determined in 2017 that a way to upskill the community on matters of research integrity would be to broaden the reviewing pool, which had previously been confined to committees. Reviewer training is provided and new reviewers are initially supervised by experienced ones. It is the University's ambition that all active researchers (excluding pre-confirmation doctoral students) will become reviewers. All academic and doctoral research at Sheffield Hallam must undergo ethical scrutiny (more details are provided in the Institutional Statement). The review and approval process is managed through the University's online ethics review system and overseen by the University's Head of Research Ethics.

The unit has a number of academics trained to undertake ethical reviews and these researchers engage in debates at national and international levels, particularly in the context of the rapid expansion of technologies, ensuring that ethical standards continue to be fit for purpose. For instance, the EPSRC-funded research project Enabling Ongoingness, in collaboration with Northumbria University, led to the development of an ethical roadmap resource, created to support the discussion and enactment of ethical practices in research. It is currently being utilised by researchers across the UK and in Australia. This work has been identified by the EPSRC as a potential focus for the Observatory for Responsible Research and Innovation in ICT (ORBIT), an organisation commissioned by the EPSRC to promote responsible research and innovation in UK Information and Communications Technology research.

# 2. People

# **Staffing Strategy**

Within the ADRC, and the more recently established unit, several individuals (noted below) who joined the institution on fractional appointments have progressed to the professoriate during this census period, leading research in their particular fields. This has been key to the sustainability of and succession planning within the unit.

The professoriate of the unit constitutes a group which is responsible for strategic leadership, management, staff development and research mentorship. The staffing strategy and development is framed by the principles of the Concordat to Support the Career Development of Researchers, which guides both the institutional policies and practice that are implemented by the unit's leadership group.

In REF2014 we submitted 30 staff members with a combined FTE of 24.46. Since the beginning of this census, 9.20FTE submitted in 2014 have moved on to other activities or institutions. Despite this movement of individuals, we have increased the FTE submitted to 31.25, with a headcount of 39, through the development of individuals new to research (ECRs Stewart, Koulidou, Spence) and through E3 appointments. As part of the delivery of E3, funding has been allocated to support fractional secondments of staff from fine art, design and media (and the wider disciplinary base across the university), who are new to research, but whose enquiries will aid the project delivery and foster sustainability for the future. We will adopt this model in future research bids.

### **Career Development**

The University has held the HR Excellence in Research Award throughout this REF period. Career progression is actively encouraged and career pathways for staff at all stages are set out clearly at the University level, supported by workshops and courses run by the University, and further supported by the unit's mentorship scheme, where all staff are allocated a Professor or Reader as a research mentor. The unit adheres to the concordat principals and applies them in cognisance of our constituent sector. Our approach focuses on the recruitment, training, retention and career development of research staff within an environment that respects the diversity of all, supporting



staff to achieve their potential in contributing to the unit, the University and wider. This is achieved by alternative working arrangements e.g. part-time and flexible contracts, and promoted and underpinned by university gender, race and disability equality schemes, ensuring compliance with all relevant legislation.

We are proud of the track record of support for the career development of academics within the unit. Only one external professorial appointment has been made in the census period, through the E3-funded project (Lloyd-Jones), whilst all others have been developed through and by the mentorship scheme operated by the unit. The following have progressed from Senior Lecturers or Readers to Professors during the census period: Wilson (2014), Heath (2014), Autogena (2014), Johnson (2017), Yoxall (2018), Craig (2020). During the same period Shaw (2015), Reeve (2018) and McCarthy (2015) have progressed to Readers. In common with our sector, the unit has always supported flexible and remote working (which has become the norm since COVID restrictions) and supports a number of fractional staff, who constitute 48% of the headcount of this submission.

Not only is the development of the individual supported through mentorship and leadeship, but also in how the individual strengthens the sustainability and continuity, and challenges and refreshes the thinking and knowledge of the centre. Professors and Readers are key to this approach, setting a culture in which personal development is the norm and advancement is actively promoted through formal annual Performance and Development Review (PDR), mentoring, and informal advice and guidance. Peer mentorship and support also occurs through participation in the research groupings described above.

Annual PDRs support staff research activities by recognising success, and identifying research needs and targets for the coming year and beyond. The process is supported by an online toolkit and guidance, which includes specific information on research objectives, as well as guidance on appraising researchers. This process is underpinned by a new Academic Careers Framework (ACF), which creates a recognition and reward structure for staff across four strands, one of which is Research and Innovation, also embedding impact as a recognised career path.

The University REF Code of Practice defines our approach to identifying staff with Significant Responsibility for Research (SRfR) and Category A REF-eligible staff. The process for time allocation is integrated into the annual round of PDRs, led by the academic departments. Staff working towards SRfR can be allocated 'academic development' time and are supported in their trajectory towards independent research. Readers and Professors receive a minimum of 40.8% research time allocation per annum. However, QR and externally-generated income has been used strategically to extend this time to support staff.

Ten staff with teaching and leadership roles have been supported with extra time allocated in their work plan to undertake doctoral study at Sheffield Hallam or at other institutions. This support builds a significant and sustainable research community, with achievements in this area including staff in this submission: Craig who gained her Doctorate in Design and Health (2014), Gent who completed a Film doctorate (2019), Levick-Parkin who completed a Design Education doctorate (2018), and Ling who completed a Fine Art doctorate (2017).

### **Research Assistants/ECRs**

The unit is committed to the career development of Post-Doctoral Research Assistants (PDRA) and, as such, they are supported and mentored so that they remain on a trajectory to become independent researchers in their own right. PDRAs have been cited as co-authors on a number of outputs submitted (e.g. Life Café/O3878 and Starworks/O3801). Through securing further external funding we aim to transition these ECRs to permanent status, ensuring the retention of skills and expertise, or to prepare them for future careers elsewhere in the sector. PDRAs are offered generic training through Research and Innovation Services (RIS) in support of their career development, while subject-specific training and teaching experience is delivered through the unit as part of their academic development. Through the E3 programme, training and tools are being developed to support Design researchers working in the context of health.

# Staff Exchange

In addition, there have been inward and outward exchanges, for example: Ken Arnold (Head of Public Programmes Wellcome Trust) was invited to run a series of seminars supported by the university's Creating Knowledge Impact visiting researcher scheme; Craig is visiting professor at Canberra University, Australia; and Wilson is on secondment as resident artist at the Graduate Centre, City University of New York, USA.

# Visiting Staff

The unit has hosted a range of Visiting Professors from international institutions, for example: to provide staff with opportunities to collaborate (Milano Politecnico, Italy, and Canberra, Australia); secure co-funding (Auckland University of Technology, New Zealand); co-publication (Swinburne, Australia); mentorship, additional research leadership, and subject specific expertise (Tampere University, Finland; Kyoto Institute of Technology, Japan; China Academy of Arts, Central Academy of Fine Arts, and Shanghai Academy of Fine Arts, all China; University of Trento and University of Torino, both Italy); and PhD students who have engaged in collaborative research (University of Porto, Milano Politecnico).

# **Development Funding**

The unit supports staff in the development and delivery of their research and its dissemination through an annual funding round, helping pump-prime and deliver outputs through travel, production, conference attendance and other research costs. Almost £500,000 was allocated during the census period, supporting 36 members of staff (not including five recently recruited staff), including established researchers, ECRs and staff new to research. Funds from the unit and the university's Developing International Research Collaborations (DIRC) fund was also used to foster international partnerships and to promote the work of the centre at national and international events.

Outputs from this initiative have included: (Cigar Box Guitars/O3790), (Querying Queer History/O3970), (Kos: Material Witness/O3882), (A Soft Rebellion in Detroit/O2906), (Graphic Design and the REF/O2940), (Mirror I: Hierarchy/O3867), (Sacred Spaces/O3959), as well as ECRs (e.g. Spence) and staff who are developing research profiles. This funding has also been significant in pump-priming major external funding applications, detailed in section 3.

The Creating Knowledge Investment Prospectus was launched by the university in September 2018. The prospectus committed over £1million of internal funding in 2018-19 across seven funding streams, to support researchers at all career stages to develop research and innovation activities and to stimulate activity that aligns with our research priorities. Examples of funding awarded include: Autogena, Platform Fellowship (£29,884) that supported the underpinning research that led to her ICS; Chamberlain, Strategic investment/capacity building (£52,872) that led to the successful E3 award; Atkinson, Impact Acceleration (£5,000) that supported the 'From Scotland with Love' ICS; Petrelli, Cluster funding (£1,715) in support of the Digital Materiality Lab; Cotterrell, Cluster funding (£2,000) to support the *Empathy & Ris*k research theme.

# Postgraduate Students

**Postgraduate research** plays a significant part in building a sustainable research community within the unit, and addresses the unit and University's strategies. Our doctoral programme supports the development of new researchers, builds supervision capacity, develops new projects, and establishes rich research cultures within the unit and beyond.

Supervision teams include a Director of Study and normally two co-supervisors and advisors drawn from relevant areas of expertise, to support the student's inquiry and monitor progress; this team is supported by a postgraduate tutor who provides additional pastoral support. PGR training



can be described as three concentric circles. At the centre is specific training on practice-based research; then wider focused training for students across the research institute, taking in the different disciplinary needs of students in art, design, media and the wider humanities; and then University-level generic research skills training.

The unit's practice-based training focuses on the ways that practitioners engage with (and challenge) research conventions, as well as examining structures of practice-led inquiry; methodological heritage of practice-led research; exhibition as research; ethical issues for practitioners, especially concerning where authorship in collaboration is understood; the complexity of working across disciplines; and the relationship between the written and visual elements of submission. At the Institute level of training we use the cross-disciplinary community to challenge cultures, languages and methods of research.

In 2014 we instigated the annual Method conference for postgraduate students. Instead of providing a forum to present successful outcomes, Method invites all students across the research institute to critically examine the methods and process of undertaking research. Method is the fundamental core of research all researchers must attend to, so it is a site of common ground and also profound difference in action and philosophy. Method requires a number of training events to ensure students are equipped to analyse their method. In the last three years we have alternated Method with Impact. For Impact we use the same approach of detailed examination of processes, but to explore how art and design researchers generate and evaluate their impact. These events have been opened out to the wider University doctoral community. As should be expected of good doctoral level education, we also engage the students in a critical conversation about the problems of the ways impact is measured and funded. A key delivery of the E3 programme is to provide training in Design for Health to support the sector.

New VC Scholarships and Graduate Teaching Awards (GTA) have been introduced during this census period. Seven scholarships/awards were secured by the unit, with one recipient now employed as a post-doctoral researcher and another supporting an AHRC-funded project. Simultaneously the unit has also targeted externally-funded scholarships (e.g. E3). While these have been successful in increasing the number of PGR students to 34 currently aligned to the unit, completions in this census period have been impacted by COVID; however graduation numbers from REF2014 have been surpassed.

# **Doctoral Collaborations**

Students are active in their disciplinary communities, organising exhibitions and conferences, publishing, and working with research students in other institutions. Recent projects include a student-led exhibition exploring the complexity of presenting 'research', a publication on 'double-agency' and a conference on Visibility. Research partners include S1 Artspace and the Site Gallery in Sheffield (our students have access to studio space at both), the William Morris Gallery and the V&A in London, and English Heritage. Students have been supported through the AHRC Heritage Consortium's Centre for Doctoral Training (CDT), receiving a PGCert in Heritage Studies and the opportunity to undertake a placement with institutions, including the British Transport Museum and the National Trust. Sheffield Hallam hosted the 2018 Heritage Consortium. Membership of the Consortium has been significant for the unit in helping build an interdisciplinary network of academics and non-HEI partners in the heritage industry.

Since 2017, the unit has achieved sector-leading student satisfaction scores in the national Postgraduate Research Experience Survey (PRES). In 2019, 94% of students said that overall they are satisfied with their experience on the programme, in comparison to a sector average of 81%. This outcome reflects the unit's strong commitment to enhancing student experience that is devised to draw people together and create spaces of dissemination in a pandemic context, including the development of 'oHPo', a digital radio station to broadcast from the art school, activating new forms of studio community.

### **Equality and Diversity**

The University's Equality Objectives 2017-20 are fully set out in the Institutional Statement.

The foci of the unit's equality objectives are concurrent with the univeristy's and these are: to i) bring about a step change in race diversity and equality; ii) continue to eradicate gender disparities; and iii) ensure an inclusive, accessible and open working and learning environment for all staff and students and share responsibility for equality, diversity and inclusion throughout the University. At Sheffield Hallam, every member of staff has an equality, diversity and inclusion objective as part of their annual appraisal and undergoes mandatory equality and unconscious bias training.

The unit is comprised of 39 Cat A staff; 21 are female and 18 are male. Our professorial leadership group is comprised of 5 women and 7 men, all on permanent contracts. The wider cohort is currently comprised of 21 Professors and Associate Professors/Readers/Principal Research Fellows (12 female, 9 male). Lab4Living employs 7 headcount fixed-term staff (3 female, 4 male) and 10 fixed-term Research Assistants (5 female and 5 male). This has been strategic to develop more women leaders.

When compared with the University as a whole, the unit has a significantly higher proportion of female staff members with SRfR (56%, as compared with 46%). This is even more considerable an achievement given the unit as a whole (SRfR and non-SRfR), which has a higher proportion of men staff (65, as compared with 51 women). The unit submits a higher proportion of staff members who have notified of a disability when compared with the University as a whole (5.13%, as compared to 4%). The majority of staff members in the unit with SRfR are of white ethnicity (71.79%). Statistically the ethnicity information for SRfR staff members in the unit is encouraging, with the majority of the unit's non-white ethnicities being submitted.

In the wider department, BAME staffing is 7%, which is comparable with the University as a whole. This compares poorly with 15% in the higher education sector and 16.1% in the working age population of Sheffield City Region (although it is recognised the academic recruitment market covers a national and international talent pool). There is an urgent need to support the recruitment and development of BAME academics. As with gender, this will be a focus of our recruitment strategy. Seeking opportunities to address equality and diversity, Ling has been appointed as a member of the Sheffield Race Equality Commission, and Sheffield City Council's Decolonising Street Name, Statues and Monuments Group.

#### 3. Income, infrastructure and facilities

#### Income

The unit's internal mentorship scheme and investment in developing external partnerships has paid dividends, increasing income during this census period. The comparison of income from research sources noted on REF4 for the last census period was £2,748,001 and for this period stands at **£7,986,427**.

We systematically apply for and have secured research funding from various bodies and schemes, ranging from European Union, AHRC, EPSRC, British Council, Innovate UK, NIHR, Health Foundation, GCRF and charitable funding such as Marie Curie. This has supported the development of a portfolio of outputs, as documented in REF2, and enabled the development of research active staff. Major awards have been secured, such as three NIHR i4i grants, leading to outputs (Support4All/O3986, NIV mask/O3987) and supporting ICS (Lab4Living); CLAHRC NIHR (HOSPITAbLe/O3901); and EU H2020 outputs (meSch/O3881, Thinking Through Things/O3902).

Another key source of funding is non-HESA reported funding, which has been critical in supporting the delivery of research outputs and ICSs. For example, Heath alone has generated over £2m in



support of her outputs (From Scotland with Love/O2914, Lift Share/O2916, We Are All Migrants/O2915) and ICS - from sources such as Creative Scotland, BBC, Screen Scotland, British Film Institute. Other non-HESA sources include City of Calgary Public Art (Shaw), HEC Art Contemporain (Kivland), Arts Council England (ACE) (McCarthy), National Coal Mining Museum, Heritage Lottery, ACE and Jerwood Arts (all Johnson).

# Infrastructure

The University's new research structure consists of Research Institutes, Research Centres, Strategic Research Clusters, operating alongside Departments, to encourage and support interdisciplinarity. The new model adopted by the university is aligned to the previous long-standing structure of the Cultural, Communication and Computing Research Institute (C3RI), the Art and Design Research Centre (ADRC) and, in 2019, the development of the Lab4Living research cluster into a research centre.

Research leadership has changed over the last twelve months. Professor Chamberlain, who was former Co-Director of C3RI and Head of ADRC, is now Director of Lab4Living; Professor Cotterrell has been appointed the Director of the Culture and Creativity Research Institute (building on C3RI, with the addition of Humanities); and Professor Autogena has been appointed as Head of the Art and Design Research Centre (ADRC). The unit's professoriate has representation across the core structures of the university, including the Senior Leadership Group (Chaired by the VC), Research Leadership Group (Chaired by Pro-VC for Research) and Creating Knowledge Committee (Chaired by the Dean of Research). Professor Swann has been recruited into a new role as Research Lead within the Department of Art and Design to support emerging researchers.

Since restructuring in 2020, administrative support is led by Research and Innovation Services (RIS), which operates a hub and spoke model of service delivery, comprising a centrally-based facility providing overarching support and coordination, with delivery teams embedded in Research Institutes (RI). The UoA32 submission is supported by the Culture and Creativity Research Institute team (8FTE), who also provide support to UoAs 27, 28 and 34. This team provides support for events organisation, project administration, postgraduate research (student, supervisor and management support), servicing committees, health and safety, research and consultancy activity, and management support. Each RI has an Innovation Manager to support connections with business and community groups, and consultancy and contract research. The Lab4Living Strategic Centre is supported by a dedicated Project Manager and Administrator (2FTE), who work closely with the Research Institute team. The unit also employs a full-time Research Associate, responsible for publications and events. To help develop and deliver our impact agenda and support ICSs over the census period, an Impact Researcher was appointed in 2015 to embed impact within the unit.

The centrally-based Research and Innovation Services team provides support to the RI teams (see Institutional Statement). All external funding proposals go through a triaging and peer review process, which then engages staff with internal and external bid development support. A rigorous authorisation process is undertaken for sign-off by the Head of Research Centre, Head of Department, Head of Research Finance and the Associate Dean for Research and Innovation. Research project leaders are guided through start-up meetings to establish administrative, financial and management assistance, and ensure they are supported in project delivery. They are also supported through the Research Institute's Project Support and Monitoring Group, which requires periodic reporting to management to track progress, identify barriers to delivery and, where appropriate, provide staff development and peer support to project leaders.

Quarterly research monitoring meetings broadened their agenda to identify, share and consolidate support for the developing impact from the research being undertaken, as well as reviewing the possible impact from research conducted in previous periods. These monitoring meetings include the involvement of a RIS Intellectual Property Manager and a member of the university Business Marketing and Media team, to enable early IP protection and dissemination strategies for



developing knowledge. In addition, university staff development courses are available in developing and managing impact. These have been enhanced by subject-specific knowledge, led by senior researchers who have managed and developed impact, and who have experience of the wider application of knowledge within the unit. Currently all researchers have a 'critical friend', or mentor, assigned at the beginning of each research programme, whether the research is self-initiated, internally-, or externally-funded. Since 2013 this mentoring process has encompassed the impact agenda. Where appropriate, academic impact mentors can be sought from outside of the subject span of the unit, where the impact under review is not within the domain of our expertise.

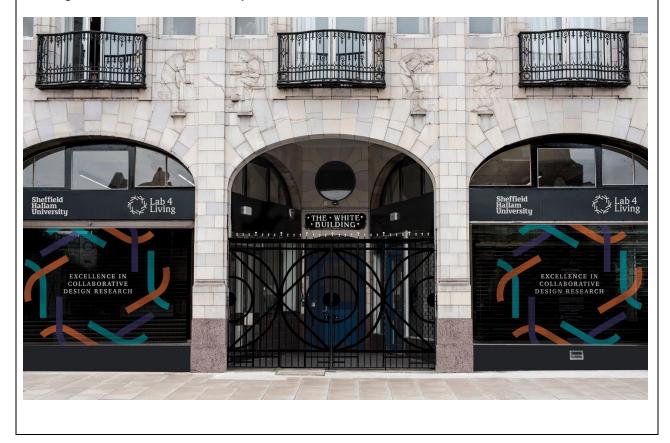
Supporting all of the above, RIS collates data on impact, capturing feedback from external clients about the benefits of our interventions. This feedback will support further REF submissions and also improve internal protocols and communication with the wide variety of external agencies utilising our research and that of the wider university.

The University's Library Research Support Team provides expert advice, training and support for matters such as Research Data Management, Open Access and a publications repository. The conduit to the ADRC and Lab4Living is through Professor Atkinson in his formal role as committee member of the Open Research Operations Group.

Health and Safety (H&S) for the Institute is overseen by the College H&S Committee and supported by the specialist University H&S Service, with a senior ADRC academic (Yoxall) H&S Lead within the Institute.

# Facilities

The unit operates from office, studio and specialist state-of-the-art production facilities, and as part of the E3 project, Lab4Living accessed a newly customised, refurbished city centre 'showcase' and 'test bed' facility (see below), to engage with the community, aligning with both the university's civic agenda and the aims and objectives of E3.





The unit has initiated collaborations for shared facilities through the Sheffield Robotics group, a formal collaboration with the University of Sheffield. An annual round of capital bids provides resources to support individual members of staff, research clusters and the development of specialist labs. Design Futures provides expert knowledge and cutting-edge facilities to support KT and consultancy work, as well as engage in and support research activity. Research undertaken within the unit draws on the extensive resources across the university, such as the simulation hospital used to train NHS nurses, which has been utilised on a number of projects including Lab4Living (Support4All/O3986).

### 4. Collaboration and contribution to the research base, economy and society

### Research Collaborations, Networks and Partnerships with National and International HEIs

Through strategically targeting major funding bids, the unit has engaged in numerous **collaborative networks** across a range of disciplines and countries. As the only Design research team contributing to the national NIHR 5-year CLAHRC programme, Lab4Living worked closely with Sheffield University, Bradford University, and Hospital Trusts across Yorkshire and Humber. This led to collaborative work (Chamberlain, Craig) with the North London CLARHC NIHR programme, the British Geriatrics Society, NHS England Patient Safety, and the Royal College of Physicians. Langley was also the lead for Lab4Living on the NIHR D4D Med-Tech Co-operative and a founding member of the Technology and Innovation Transforming Child Health Network (TITCH), linking paediatric clinicians across the UK interested in child health innovation.

Formal **international collaborations** have emerged through H2020 funded projects (NESTORE), (meSch); and with Auckland University of Technology, funded through the Royal Society of Arts New Zealand, exploring the design of dementia-friendly spaces (Craig and Chamberlain).

The Narsaq International Research Station facility located in South Greenland (<u>www.narsaqresearchstation.gl</u>) has been established by Autogena through her research 'Kuannersuit; Kvanefjeld'/O3936, noted in REF2. This Station is intended to facilitate and encourage cooperation across disciplines and provides a platform for researchers and organisations to learn from Greenland and its importance to the rest of the world.

Over the census period we have been instrumental in initiating and developing the CHEAD Research Alliance, which is now chaired by Kaner and Manghani. This initiative by Roddis (Sheffield Hallam) and Seawright (University of Ulster), with Paula Graham-Gazzard, who was Policy and External Relations Director for CHEAD, led to CHEAD developing a programme of seminars and symposia dealing with research topics, including the Next Generation Leadership within the sector and responses to the REF consultations (see https://chead.ac.uk/researchalliance). As part of this initiative, ADRC co-funded with CHEAD an investigation into the comment in the REF2014 subject overview report noting: 'a number of weaker discipline areas that, on the evidence of submitted outputs, appeared not to have developed since RAE2008. While there were high-quality exceptions, the intellectual and theoretical underpinning of graphic and communication design was thought to be generally weak'. The impact of this research can be seen in REF2 ('The Challenges for Graphic Design in Establishing an Academic Research Culture: Lessons from the Research Excellence Framework'/O2940). The work has led to three national symposia organised by the Graphic Design Association, held at Sheffield Hallam, Loughborough University and the Royal College of Art. The work has also been presented at five conferences and invited talks (Sheffield Hallam, University of Limerick, Northumbria University, Ulster University and the CHEAD annual conference at University of South Wales).

#### Engagement with Key Research Users, Beneficiaries or Audiences

It is a strategy of the unit to engage **beneficiaries** of the research in the research itself, to maximise uptake and adoption. End users are frequently involved and a community of lay researchers has been nurtured and trained over a number of years as co-researchers through



Lab4Living. The nature of much of the research and the diverse contexts and communities in which it takes place means there are wide-ranging beneficiaries. This includes a range of academic disciplines, the general public, government, business and industry. The creative skill set and working methods across the unit means there are a variety of formats and vehicles of dissemination adopted.

Staff have **disseminated research** through monographs, films, music, audio works, exhibitions, journal articles, artefacts, conference presentations and theatrical performances to a diverse range of audiences including, the European Commission, Greenland government and Navajo Nation (Autogena), Maori Nation (Heath, Craig and Chamberlain), Scottish diaspora (Heath), stateless communities, and in developing countries including Vietnam (Johnson), Rwanda and Sri Lanka (Cotterrell). Research that gives voice to marginalised communities has been a feature of much of the research undertaken by the unit. Johnson's AHRC funded 'Alone Together/O2917' and 'a ROLE to PLAY/O3537' engage diverse communities in London and Bolsover, Craig's work focuses on health inequalities and the elderly, while Langley's work involves children with prosthetics.

As part of Wilson's artist-in-residence at CUNY, he helped deliver the New York leg of Wellcome's first fully international project 'Contagious Cities', in 2018. He is currently developing with Wellcome their next international project, with a mental health theme and youth focus, titled Mindscapes.

To maximise the influence of the unit's research, staff seek to **influence** key policy and decision makers. For example, Autogena presented at the European Commission's Joint Research Centre (JRC) and COP24 2018 UN Climate Summit in Katowice; and Craig's work is a key component in the delivery of the dementia strategy for Allied Health Professionals in Scotland, and has impacted policy in Scotland and is part of the West Wales dementia wellbeing pathway. Recent policy-based work has involved Cotterrell's evidence on the contribution that research in the Arts can make to the fight against radicalisation, presented to the House of Commons British Council APPG (2017), and subsequent membership of the parliamentary Community of Practice on Preventing Violent Extremism (2018-20).

Lab4Living held five international Design4Health conferences to date and in 2017 it was hosted overseas by Swinburne University, Melbourne, Australia. Plans were underway to host the 2020 conference in Amsterdam, in partnership with the WAAG Society, University of Twente and University of Applied Sciences Amsterdam. However, although proceedings were published, the conference and exhibition were cancelled due to COVID.

The Transmission initiative, developed and led by Kivland since its establishment in 2001, is now in its nineteenth year. This annual series of lectures, symposia and publications addresses the aesthetic and discursive forms of practices in the field of contemporary art and theory concerning sociality and subjectivity. Many in the Fine Art domain who have submitted to RAEs/REFs over this period have used the opportunities offered by Transmission to discuss, develop, debate and disseminate their research. In 2015 Kivland added to these opportunities for researchers with the establishment of her imprint MA BIBLIOTHÈQUE, which publishes and promotes experimental writing in the visual arts, emphasising reading and re-reading.

### Indicators of Wider Influence, Contributions to and Recognition by the Research Base

### Journal Editorships

Developing and leading initiatives that engage the sector and wider communities has been instrumental in presenting **opportunities for collaborative research** for staff, as well as for the sector at large. Editorship of the Design Journal (Taylor & Francis) has been within the ADRC since 2014 and throughout the census period. Expanded now to six issues a year, it continues to shape discourse in the field and to engage staff with a range of external networks. The journal's editor, Atkinson, was also President of the European Academy of Design (with which the journal is associated) from 2014-19, overseeing its international biennial conference. An AHRC network



grant led by Chamberlain, 'The State of the Art of Design in Healthcare' - working in partnership with the Royal College of Art, Glasgow School of Art and Coventry University - provided the business case for the establishment of the Design for Health Journal (Taylor & Francis). Edited by Chamberlain, Craig and Atkinson, and launched in 2017, its success led to increasing publications to three issues a year in 2020.

In addition, staff undertake editorial roles for academic journals, for example Heath is an advisory board member of the Film Education Journal, and Kivland was Commissioning Editor for E.R.O.S. Journal between 2015-18.

### Participation in Committees, Panels and Boards

Staff continue to influence the development of discourse within their disciplines through a **wide range of positions** held on international committees, panels and advisory boards, membership of peer review panels for grant awarding bodies and other activities. For example, Craig is Vice Chair of the Royal College of Occupational Therapy Research and Development Board, while Autogena is Artist Expert to the EU commission's Science Policy Centre. Atkinson is Executive Committee Member of the International Committee of Design Histories and Design Studies (ICDHS) and involved in the organisation of its biennial conference. Chamberlain was panel member for the Performance Based Review Fund, New Zealand (2019); Chamberlain and Cotterrell panel members of the FCT Ministry of Technology, Portugal (2019); Lloyd-Jones is peer reviewer for the National Science Foundation, USA; and Petrelli is Expert Reviewer for the Italian Ministry of Education, University and Research (MIUR) (2017-present) and the EU (2016-present).

### Keynotes

The unit's **international profile** is evidenced by invitations to speak at major international interdisciplinary forums. For example, Lloyd-Jones presented a keynote 'Reimagining Precision Medicine through Design' at Columbia University Centre for Precision Medicine and Society, USA 2019; Craig 'OT meets IT' at the ENOTE conference Zagreb (2017); Heath 'We Are All Migrants' at the HERA conference Imag(in)ing Europe, Utrecht (2016); and Autogena at the European Geosciences Union (2016).

#### Prizes and Awards

Design Futures packaging have won Packaging Design Team of the Year in 2015, 2017, 2019, 2020 (they didn't enter in 2016 and 2018). The **award**, open to all commercial ventures, is honoured by the UK Packaging Industry and judges have remarked 'as well as design and development, Design Futures has a world-leading packaging research facility within its agency'. The team also won 'Research Efficient Pack of the Year' award in 2020. Research in this field continues to have influence and Yoxall is chair and convenor of Technical Committee 122 Working Group 9, looking at standards on accessible packaging.

Research within the group has been recognised through national and international **awards**. For example, Swann's ABC Syringe won International Council of Societies of Industrial Design's Biennial World Design Impact Prize (2014), and his Ebola: Bleach Dilution Gauge/O2972 won best design exhibit at the 3rd European Design4Health conference (2015); Reed and Chamberlain, 'Most Innovative Design for Ageing' in the UK's Over 50s Housing Awards (2017); McCarthy, the Evelyn Williams Drawing Prize for COPY/O3984 (2019); Colley, the Itami International Jewellery Award for Re-Mains/O2939 (2019); and Autogena, the National Academies Keck Futures Initiative Award for art and science, engineering and medicine frontier collaborations (US).