

Institution: The University of Wolverhampton
Unit of Assessment: 32 Art and Design History, Practice, and Theory
<p>1. Unit context and structure, research and impact strategy</p> <p>As scholars and as a community of researchers, we seek to create the very best experiences for our staff and research students. Research in Art and Design at the University of Wolverhampton has a strong heritage and legacy of practice-led research, linking into socially-engaged practice. The trajectory of our research in consecutive research assessments has been positive with increases in both the quality and the volume of research. Here, we show how research has developed and been supported since 2014.</p> <p><u>a) How Research is Structured across the Unit</u></p> <p>The Unit members of eleven full-time and three part-time staff with significant responsibility for research belong to the Centre for Art Design Research and Experimentation (CADRE), which accommodates staff from the Wolverhampton School of Art (SoA). CADRE was established in 2006 to cover the range of art and design research including fine art, digital video, and 2D and 3D design. Research here is mostly practice-led, as reflected in the submission of twelve practitioners (including CADRE's Director, D.Harrison) and two theorists. The overall aim of CADRE is to explore and develop the benefits of art and design to society, and research takes place across three themed clusters:</p> <p>Art, Philosophy and Social Practice (APSP) - This cluster continues a critical engagement with art's social and participatory impact and the legacy of 'socially engaged practice', a core area in the SoA since 1985, when it delivered one of the first undergraduate degree courses in Art and Social Practice in the UK.</p> <p>Digital Technology Theory and Practice (DTTP) - This cluster comprises animators, film/video-makers, and digital media artists and theorists. Its research roots extend back 20 years, with renowned international film and video practitioners such as Sherwin and P.Harrison.</p> <p>Material and Theoretical Practice (MTP) - This cluster investigates how co-design and craft-making contribute to the building of sustainable, proactive communities across diverse sectors including amateur crafts, health advocates and professionals, and those involved in museums and heritage.</p> <p>The clusters are led by Professors and Readers who together with CADRE's Director form a steering group to discuss, in liaison with the Head of School, matters such as research direction and strategy, interdisciplinarity, mentoring, research leave, research hours, REF progression, and the monitoring of equality and diversity within the centre. CADRE reports to the Faculty Research Committee (FRC), which oversees annual monitoring, ethics and doctoral training. The Faculty Post-Graduate Tutor manages student progression and annual monitoring, they also act as triage for applications, interviews and the organisation of supervisory teams. There is also a Faculty doctoral tutor available for pastoral care and both tutors report to the FRC, which in turn reports to the University Research Committee.</p> <p><u>b) Research Objectives Past and Future and Performance</u></p> <p>Previous to REF2014, research strategies were in place to encourage our studio practitioners to consider their practice as research and then to support their ongoing development. This led to the formation of a thriving and inclusive research culture, submitting an FTE of 25.70 (33 headcount) to REF2014. CADRE also nurtured staff in the School of Performing Arts with seven included in</p>

REF2014. This group has since grown significantly in strength and numbers and is submitting as an independent Unit to sub-panel D33 in REF2021 with 17 staff (16FTE). CADRE staffing was also affected by moves to other Universities and retirements.

The smaller centre (20 staff, 12.5 FTE) required a new research strategy and a Five Year Plan for 2015-2020 was formed. This plan focussed on developing collaborations firstly between cluster members, then between clusters, followed by building networks to enable collaborations external to CADRE within the University and beyond. A research assistant was appointed to work with the Professors and act as a broker between the art and design projects and the University Project Support Office. This plan successfully resulted in a number of large funded interdisciplinary projects with external partners and stakeholders. It also served as a means of mentoring ECRs and PGRs who were brought under the wing of the Professors within the projects.

When designing the larger collaborative international projects, Professors took advantage of this expansion of shared interests within and across clusters, external to CADRE within the University, and beyond the UK. For example, Roberts included Kossoff in the Horizon 2020-funded Innovative Training Network the Future of European Independent Art Spaces in a Period of Socially Engaged Art (FEINART) as supervisor to post-graduate researchers (PGRs) using film in documentary research, and Hackney included Rogers as an artist with practice in social engagement in her AHRC funded Maker-Centric project working with small crafting communities. Hackney also included three of the lecturing staff from the SoA in her projects as a mentoring opportunity where they could actively learn research skills and methods and join CADRE as potential ECRs. This form of inclusivity ensured sustainability for the research area. Similarly, for the design-orientated Horizon 2020 funded MinD project, D.Harrison was included as an artist working with mixed-media installations. Out of the four prototypes emerging from MinD, three were graphic designed booklets and games, while one was a mixed-media system 'Let's Meet Up' directly based on her work. This inclusion ensured the project's sustainability when D.Harrison was able to take-over following Niedderer's move to another University (they now continue with their fruitful collaboration cross-University). MinD also included researchers from the Faculty of Health and Wellbeing, and the Faculty of Science and Engineering.

Five Year Plan

Following REF2014, CADRE reviewed activity and revised its approach in order to focus on areas of excellence, impact and interdisciplinarity. The aims of CADRE's Five Year Plan can be summarised as:

- Sustaining and promoting excellent Art and Design research and innovation that is nationally valuable and an international point of reference;
- Developing research capacity and leadership by shifting from encouraging individually published outputs to initiating collaborative research projects with staff as PI/Co-I;
- Nurturing the next generation of researchers by maintaining a critical mass of research degree students, ensuring a vibrant subject research ecology and a multi-generational research environment (students, ECRs, mid-career, and senior researchers);
- Providing a flexible environment conducive to developing new lines of enquiry, recognising world-leading excellence and increasing collaborative/cross-disciplinary research;
- Impacting the cultural and creative economy in the nation and beyond, improving knowledge and understanding of the creative industries in the region, and developing the relationship between art and design research, and social, cultural and economic realms;
- Expanding impactful art and design knowledge exchange/technology transfer and consultancy to the public sphere and professional arena. All researchers now create an independent impact strategy appropriate to their particular form of research;

- Augmenting the quality of our research from REF2014, which had 43% 3*-4* outputs;
- Encouraging researchers to focus on the benefits and users of research and to maximise the reach, significance, and plans for impact of their research at the outset;
- Nurturing and expanding research capacity in our two newly developing areas of design for health and wellbeing and co-creation; and
- Expanding upon existing career progression strategies (aiming by the end of the five-year period to embed one new Professor, one new Research Fellow, one promotion to Reader, one promotion to Senior Research Fellow) with University support to re-evaluate art and design research within the School's programme.

The three CADRE clusters of researchers provided continuity from REF2014. Each cluster enables researchers to be part of an inclusive and thriving community of peers with similar disciplinary specialisms; works with other clusters through collaborative activities; creates forums for the exchange of ideas, collaboration, and mutual support; provides opportunities for professional growth and close mentoring for its ECRs; and serves as a space for postgraduate research students to develop a collective research identity and to develop professionally.

APSP - This cluster continues a critical engagement with art's social and participatory impact and the legacy of 'socially engaged practice', a key area of research since the appointment of Roberts in 2000 (now Professor of Art and Aesthetics) who leads this group. APSP provides a distinctive combination of art theoretical and philosophical work on a range of different forms of socially engaged practice and performance/dramaturgy, as per the example of the work of Chukhrov, a Marie Skłodowska-Curie fellow, Penzin's work with the Russian collective 'Chtot Delat', and the appointment of Rogers as a social-art practitioner. Other members include practitioners using photography and film or drawing and painting to re-present past disused and derelict sites now devoid of human presence, for example the Wilson twin's installations, Altintzoglou's photographs, Read's sketches, and Harris' large-scale oil paintings. Researchers also work with the misrepresentation or underrepresentation of women in culture, for example Fenton's work on witchcraft and healing, or Glaser's reinstatement of Beatrice Warde as a seminal influence on typography. It also provides an expansive space for interdisciplinary practice future-proofed with a Marie Skłodowska-Curie Action Innovative Training Network (Horizon 2020) award of GBP2,854,886.57 in the area of art and social engagement to support a European-wide PhD training programme (2020-2024).

DTTP - The cluster is led by Kossoff, Reader in Moving Image, with practice in experimental essayistic film-making concerning the spaces and places we live, and how the history of these spaces affect and move us in the present. DTTP comprises award-winning animator Moore who collaborates with scientists to visualise the invisible in understanding mind-states; film-maker Sherwin who works with the materiality of film and light; video-performance artists Kelland exploring masculinity through his silent clown-like persona, and P.Harrison (in partnership with Wood) whose spare, to-the-point works feature the actions of their own bodies when confronting solid everyday objects with hilarious slap-stick consequences; digital media artists D.Harrison working in mixed-reality and Doyle, virtual reality; and Stewart, an artist creating self-expressive objects in glass and 3D printing. Over the last decade, DTTP has developed its analogue and digital research base generating both theory and practice with an international academic and creative impact, most recently through Doyle's connection with the EU-funded STARTS project *Identifying Successful STARTS Methodologies* (2019-2021) in collaboration with Ars Electronica, and the STARTS Prize.

MTP - This cluster comprises studio practitioners in 2D and 3D design, fashion, textiles and crafts and has a rich heritage in glass making with emeritus Professor Keith

Cummings, who continues to work with us on major events such as the International Festival of Glass (2019). MTP has built strong working relationships with cross-sectoral academic and external partners as evidenced in Niedderer's design-led project MinD: Designing for people with Dementia using co-design methods for people with dementia and co-producing publications and prototypes. There has also been cross-unit working, with Aleksandra Galasinska (UoA 25) and Jennifer Lim (UoA 3) working as Fellows on the project. Hackney's externally-funded collaborative projects with community groups have contributed to government reports (Fixing Fashion, as per the Impact Case Study) to enhance public understanding of the power of creative material practice to connect, engage and activate communities for productive change.

Performance since REF2014

REF2014 recognised Wolverhampton's Art and Design research 'environment' as being 100% 2-3*. Achievements since then, and in accordance with our Five Year Plan for the smaller, cohered, centre, have been considerable and demonstrate a more fully developed and sustainable research environment within CADRE. The doubling of doctoral completions and substantial grant capture (section 4) are evidence of our having achieved greater sustainability. The scale and scope of outputs attest to the vibrancy of our research and included:

- Publications - 13 monographs, eight edited books, 34 chapters, 28 articles and over 30 conference contributions.
- Exhibitions, Screenings and Performances - 53 group and 15 solo exhibitions, 32 screenings/performances and 12 internet publications.
- Events at Tate Modern, Tate Britain, Museum of Modern and Contemporary Art Strasbourg, Contemporary Art Gallery Vancouver, National Centre for Contemporary Art Moscow, Brussels Centre for Fine Arts, and the Imagine Science film festival Abu Dhabi.
- Artefacts and Installations - 31 artefacts and designs, ten installations, and 20 bodies of work.

Plans for the Future

Post-REF2021, we will follow on from the Five Year Plan and build on our successes. CADRE will develop a new strategy (incorporating a refreshed version of the Five Year Plan) but with focus on supporting and mentoring design practitioners from the SoA towards developing a research profile. By expanding our staff with significant responsibility for research, we will be able to sustain and advance our interdisciplinary work particularly in our most recent area of design for health and wellbeing. Subsequently this will mean a larger submission for the next REF. The new strategy will continue to facilitate the development of our ongoing projects and the creation of new ones, support for ECRs, and the inclusion of doctoral students within project development and co-authoring opportunities.

c) Impact from the research and the link to Impact Case Studies

The goal of our impact strategy is to improve the situation of beneficiaries, as the examples below demonstrate. CADRE is therefore prioritising and encouraging developing projects which have reach and significance outside academia and of benefit to those in the public/social sphere. Our research is ideally suited to impact relating to co-production, the enhancement of cultural understanding, and the influencing and shaping of debate. Pathways such as performances, artefacts and exhibitions allow us to extend messages and invite diverse audiences to engage with them. Impact accruing from the activities of audiences then enables change. Measuring progress is a complex matter and artists use comment books and feedback on websites to gather information and this helps us to understand how impact develops.

We have two Impact Case Studies, which illustrate the functioning of the strategy we have developed. These are: Technology and Collaboration in the Digital Age (Kossoff) and Art and

Design for Social Change: Agency, Engagement and Dramaturgy (Roberts). The first engenders impact through engaging with new audiences and influencing creative practice through an enhanced understanding of the interplay between technology and the Arts, for example in the rehabilitation of offenders. In the second Impact Case Study, the primary concern has been with issues pertaining to artist engagement and co-design practices for social change, for example the Designing a Sensibility for Sustainable Clothing (S4S) project, which provides effective popular tools and craft processes as the basis for contributing to policy change on sustainability and the fashion industry.

d) Supporting Interdisciplinary Research

The Five Year Plan included the aim of increasing collaborative/interdisciplinary research, which we achieved through both our externally-facing projects and our internal initiatives.

The MinD project (D.Harrison and Niedderer) brought together knowledge and expertise from different design fields, ICT, dementia care and social and behavioural psychology. Both Marie Skłodowska-Curie (Roberts) and S4S programmes (Hackney) were designed with and structured by interdisciplinary research teams and advisors, providing ECRs with a unique opportunity to work across disciplines, sectors, and with colleagues in external universities. Our 'Wellmaking' work involved ECRs in collaborative work across the design and health sectors, and an AHRC-Catalyst funded event at the Wellcome Collection in London involved a cross-sector symposium and prototyping workshop. The Arts Council-funded Museum University Partnership Initiative (MUPI) offered ECRs and PGRs opportunities to engage in knowledge exchange with designers, academics and museum professionals in the Midlands (Herefordshire Museum Service, Black Country Living Museum, Herbert Gallery Coventry, Ironbridge George Trust).

Internally, new 'SmART' (Science meets Art) sessions were run across the University initiated by CADRE to begin discussions and presentations on current projects with a view to synergy and collaborations. This continues through the University IRIS scheme, which supports Doyle in our connection with the EU funded 'START' project working with Ars Electronica in Austria. These partnerships are living and vital, allowing the quality of work to improve and greater impact to take hold.

e) Progress towards an Open Research Environment

CADRE has continued to comply with the University's Open Access policy where deposit in our institutional repository has been mandatory since the open access policy was implemented in 2010/11. A scholarly communications librarian and faculty liaison librarian met with our CADRE lead and Faculty Associate Dean of Research to discuss open scholarship, and where it would be possible to go above and beyond the minimum requirements with the right support. This also ensured that CADRE members were fully aware of the requirement to deposit within three months of acceptance.

In developing an open research culture, we have gone beyond the scope of the minimum policy requirements for meeting the Open Access requirements by enabling open access for outputs other than journal articles. There are five book chapters available through the University WIRE repository in the Unit submission, all green Open Access. Our other output types are challenging to add to WIRE in that performances, artefacts and exhibitions are not easy to archive but we are working on ways of retaining them for access as electronic portfolios. The Unit's commitment to Open Access goes beyond the material submitted in this REF period as we encourage staff to continue to deposit their books and chapters to WIRE, for example, Harrison, D. (2015) 'Exploring the liminal between the virtual and the real' In: Gianluca Mura (editor), *Analyzing Art, Culture, and Design in the Digital Age*, Chapter 5, pp51-62.

To promote open research, we encourage staff to make research processes and data openly available, and share research with a wide range of audiences. Further examples of our open research environment are our H2020 open data pilot regarding our Designing for Dementia website, blogs, other project websites, collaborations, and public engagement.

f) Supporting a Culture of Research Integrity

CADRE adheres to all University ethical processes and is represented on both the University and Faculty Ethics Committees. In this way, we support a culture of research integrity and ensure that research is conducted according to appropriate ethical, legal and professional frameworks, obligations and standards, with adherence to the Concordat to Support Research Integrity.

We also make sure that there is a session on ethics within the Faculty Research Skills and Methods training programme for PGRs and ECRs, to inform our researchers working on art and design projects which involve public engagement or links with health and wellbeing.

2. People

a) Staffing Strategy and Staff Development

Staffing strategy

CADRE does not control the recruitment of staff in the Wolverhampton SoA but engages with relevant interested staff to help them become research active and pursue their research goals. These are generally practicing artists and designers on full-time contracts who naturally gravitate towards practice-led research.

Through this process, and from successful funding applications, we have seen an increased number of early stage researchers, with six new staff submitting to REF2021, including two Research Fellows with one briefly promoted to Senior Research Fellow before moving on. In recognition of research activity, a new Chair in Fashion was awarded through the University Research Investment Fund (RIF). The staff concerned are: Simon Harris (PhD awarded 2016) one of our own PGRs who is now a lecturer at the SoA; Howard Read (PhD awarded 2020) senior Lecturer at the SoA; Gavin Rogers a strategically appointed lecturer in Social Art Engagement; Ketevan (Keti) Chukhruidze, also Russified to Chukhrov, (Research Fellow 2017-19); Fiona Hackney became our first Professor in Fashion Theory (2015-2019); and Denise Doyle was promoted to a Readership in 2018. Jane Wilson was made an Honorary Professor on leaving the University and brought her video installation 'Undead Sun' to the Wolverhampton City Art Gallery for exhibition in 2019 while in this capacity.

The only short-term contracts within our Category A staff are for those brought in to work on RCUK (UKRI)/EU-funded discrete projects, for example, Chukhrov as a Marie Skłodowska-Curie Fellow.

Staff development strategy

Due to the nature of our subject area, we are open to those needing to work part-time in order to continue as professional artists/designers. That said, the majority of staff are in full-time employment, and only three part-time. We are also aware that a high proportion of staff are lecturers at the SoA and need flexible working hours for any research activity. To facilitate this, we run a sabbatical programme in liaison with the Head of School. Our staff can apply for a sabbatical to support a specific research activity for the duration of one semester, and applications need to follow CADRE's sabbatical guidelines. This scheme usually supports four to six applications per year with eighteen sabbaticals awarded over this REF cycle. Staff sabbatical time can also be used to strengthen their research impact beyond academia by arranging activities at the periphery to an exhibition of their work using social media, organising Q&A sessions at a gallery, artist talks

and public events. For example, Stewart required concentrated time to both create a new piece and to develop his liaison work with the International Festival of Glass 2019, and Fenton needed dedicated research time for curating her exhibition *Poppets, Pins and Power: the Craft of Cursing* at the Museum of Witchcraft and Magic, Cornwall, in 2017.

We also support and enable staff to achieve impact by encouraging interdisciplinarity, through joining teams on collaborative projects which expand our capacity for impact (see Section 1b). For example, CADRE led a series of seminars with our colleagues from the Faculties of Science and Engineering and Health and Wellbeing. Our staff can apply for funding up to GBP1,200 to cover conference/event attendance on application. The same amount can be applied for to support specific project requirement such as materials or transport costs.

For those with recent doctorates, the University runs an Early Career Award Scheme (ERAS), which annually awards ten grants of up to GBP5,000, alongside a tailored mentoring and action learning programme, to facilitate the research career development of ECRs. ERAS is open to both full- and part-time staff and application can be made to extend a scholarship over a two year period for part-time staff. Six CADRE staff were made ERAS fellows in this REF period, providing research time to enable them to complete a self-managed project, usually a body of work for exhibition. For example, Harris completed two paintings for exhibit and a book chapter, while Kelland was able to conclude his *Falling Slowly* video performance for dissemination and feedback. The ERAS fellows are mentored by a senior researcher from their respective CADRE cluster to help them scope and deliver their project on time.

b) Research Students

There have been fourteen PhD completions, doubling the seven for REF2014, with an increase in PGR numbers of 8% including four Faculty bursaries and two University RIF-funded studentships. Two of our cohort completed early at two years nine months both with a straight pass, and all our students have proceeded to appointments in the sector. For example, Harris is now a lecturer at the SoA submitting with this Unit and Birchall is a senior curator at TATE Liverpool.

Evidence of studentships from major funding bodies

From our externally-funded research projects, the new FEINART Marie Skłodowska-Curie ITN grant supports eleven PGRs across the partner network, while the MinD project included four doctoral students - one each from Wolverhampton, Technische Universität Dresden, Université du Luxembourg, and Alexianer St Hedwig Hospital. These positions offer training through presentation sessions, targeted workshops for subject related knowledge transfer, running of focus groups and symposium organisation. MinD provided a rare opportunity for early-stage researchers in design to be part of an international large-scale design-led consortium. Two PGRs were brought in as Research Assistants on the AHRC-funded projects: Maker-Centric and Designing S4S Clothing.

Engaging with these projects gave them the opportunities to:

- co-produce research and participate in workshops with community participants and third sector partners;
- help organise, engage in and present at symposia;
- work alongside researchers at partner universities and third sector organisations;
- co-author academic journal articles; and
- produce and disseminate printed materials, websites, blogs, artefacts, publications, exhibitions, and toolkits for impact and wider dissemination.

Student Support

Our doctoral students are each housed within a CADRE cluster and are University Doctoral College (DC) members. The DC provides a comprehensive and holistic generic Postgraduate Researchers' Development Programme, which is mapped to the Vitae Researcher Development Framework (VRDF). CADRE complements this programme with a series of six sessions rolled out across the year focussed on skills and methods training for practice-led research, this is open to both PhD students and ECR staff. CADRE also offers students the opportunity of applying for funding up to GBP600 to support external research activity, such as visiting an archive or presenting at a conference, at any point in their study as agreed with their Supervisory team.

Doctoral students are supervised by a team of researchers who demonstrate different supervisory expertise and sets of research skills in order to optimise support for the PGR. Mandatory training is required to act as a research supervisor, as is regular CPD via the DC's Research Supervisors' Development Programme. With a view to post-doc employability, the supervisors support our PGRs with an interest in teaching by inviting them to lead on module seminars, or if they already have PG Certificates in Learning and Teaching (or similar), to contribute as a visiting lecturer. The SoA invites arts professionals to present to final year undergraduates and Masters students during Employability Week, which our Doctoral students are also encouraged to attend.

The University holds an Annual Research Conference, the first day of which focuses on PGRs. Throughout, there are themed research support sessions and prizes are also awarded for best research posters in different categories. The prize for the best visually-designed poster has been awarded to a CADRE PGR student each year over this REF cycle, and CADRE has continued to be represented at the conference by both its early stage and more experienced researchers, either giving papers or chairing sessions.

CADRE facilitates an annual student-led PhD research conference for doctoral presentations and a programme of research seminars where doctoral students are also expected to present. The centre runs a rolling programme of public lecture speakers invited by the research clusters twelve times per year, they are open to all staff, students and the public. These events are captured annually in the DC's Research Almanac, distributed in hard and soft copy to all PGRs, PGR applicants and research staff across the University. In a typical year, the almanac features over 250 events for doctoral students.

c) Equality and Diversity

The University, Faculty and Research Centre are fully committed to the advancement of equality and the elimination of unlawful and unfair discrimination. The Faculty Research Committee has formed a Gender Equality Action Plan sub-group (GEAP) to agree and monitor the action plans for any equality and diversity issues that might arise across the Units submitting to REF2021. This is complemented with an Athena SWAN Self-assessment Team to remedy any gender imbalance that might arise and to promote a more inclusive research environment. CADRE has representatives on Faculty and University equality and diversity panels, and ethics committees. The centre reviews its position with regard to equality and diversity when new staff/students join and keeps a GEAP plan, which is reported annually to the Faculty. CADRE selected its output submissions in accordance with the University Equality and Diversity Policy, and its REF2021 Code of Practice.

CADRE is submitting ten male researchers and four females, however CADRE is currently working with the SoA in mentoring a further group of five women who are now considering their practice as research. For PGRs, our current students comprise seven males and eighteen females, six of whom are international students. When reviewing the larger number of female students, both 'health and well-being', and 'social art and curation' as subject areas tend to be female-heavy so our numbers reflect the sector. The newly established FEINART project has recruited three PGRs,

two females and one male. CADRE is led by a female professor, who was also the Chair of the University's Professoriate during the REF period.

Arrangements for supporting flexible or remote working

CADRE staff and students are mostly practice-led researchers with their own home-studios to complement the SoA's workshops and resources. We are, therefore, well positioned where arrangements for supporting flexible and remote working are concerned, in that staff can work at home for concentrated research time as necessary and keep in contact with their cluster through e-mail. Meetings are kept to mutually-agreed times for when staff are on site. Supervisions with part-time students are arranged to fit in with their working and home-life patterns.

Support for staff and research students returning from periods of leave or ill health

PGRs meet with their Director of Studies more frequently on return and together agree an action plan to bring them back up-to-speed. This extra support facilitates re-engagement with their project, and the agreed action plan suggests how they can do this in a realistic way. The PGR tutor (pastoral care) is also at hand if needed, where students may require support. Staff on leave are supported through Keeping-in-Touch days, and workloads as adjusted as necessary on their return from leave.

We actively work with the technicians and health and safety officers to support staff with protected characteristics, for example, where studio access and equipment might be required, but we have no research active staff, or students, in this category at present.

We are vigilant in supporting the wellbeing of our staff and students who are made aware of the University Student Support and Wellbeing team who offer Mental Health and Wellbeing Advice for students, and of the Staff Wellbeing Hub for their own wellbeing and for that of those for whom they care.

The CADRE team meets regularly for seminars and presentations to which our PGRs are invited, and through these activities we keep a sense of community and awareness of the wellbeing of individual members. For staff, the cluster leader/mentor is also at hand for support and guidance.

3. Income, infrastructure and facilities

a) Research Funding and Strategies for Generating Research Income

As can be seen in the Centre's Five Year Plan post REF2014, research is focussed towards developing collaborative interdisciplinary projects and away from that of individual scholarship. This new strategy successfully generated a number of large-funded and highly competitive projects.

Our practice-led researchers continue to apply for and achieve funding support for their smaller independent projects from a variety of agencies, for example: GBP30,000 commission for Wilson's 'Undead Sun' at the Imperial War Museum (Film and Video Umbrella); and GBP2,000 for Roger's contribution to the 'Dreaming Tower Ballroom' project (Bertz Associates).

The Unit has a recurrent budget, the major element of which is derived directly from Quality-related Research (QR) Funding. The full value of research earnings is attributed to the faculties and schools of each individual researcher enabling travel, impact development, conference attendance, dedicated research time and the resourcing of high-level equipment essential to globally recognised work. CADRE researchers also have access to a fully-equipped art school with a wide array of excellent facilities, workshops and technical support. CADRE deploys the majority of the strategic support budget on a competitive peer-reviewed basis through annual

research planning with proposals for sabbaticals, event attendance and project development being assessed in a fourfold way:

- Quality: to identify clearly research priorities; to foster the highest quality research; and to address them with regard to the scale and scope of each research project;
- Capacity and rigour: to develop skills and realise potential in relation to ECRs, established researchers, and cross-disciplinary researchers;
- Significance and reach: to secure effective expansiveness and status of art and design research, particularly with regard to impact outside the Academy and national/international accessibility; and
- Vitality and Sustainability: to maintain a lively and vibrant community on a realistic and ongoing basis.

Our strategy to attract funding is a combination of top-down and bottom-up processes. In the latter, artists are highly proactive in seeking grants and have been successful in doing so. The top-down element of the process relates to larger calls, where a more centralised and co-ordinated effort is required. The combination of processes enables us to do two things: firstly to maintain our profile and reputation for excellence; and secondly to maintain ongoing contact, co-operation, and collaboration with our grass-roots user constituency.

CADRE has received several funding awards, and the following represents the high calibre of the research of the members of it, as well as illustrating the efficacy of the aforementioned strategy:

- The H2020 Marie Skłodowska-Curie Innovative Training Network four year project FEINART (GBP2,854,887) with eleven partners from nine countries (Iceland, Germany, Sweden, Holland, Italy, Greece, Romania, Poland and the UK);
- The H2020 Marie Skłodowska-Curie Research Innovation and Staff Exchange grant 'MinD – Designing for People with Dementia: Designing for mindful self-empowerment and social engagement'. The project ran from 2016 to 2020 with the value of GBP385,931. It facilitated the highest level research, as well as staff development for both experienced and early stage researchers with eighteen partners from seven countries (the UK, Germany, Netherlands, Luxembourg, Italy, Spain, and Australia);
- The Maker-Centric place-based, co-making communities award was AHRC-funded follow-on funding for Impact and Engagement. The award was for GBP98,986 and ran from February 2017 to March 2018 to develop co-produced toolkits with community groups to support them and others to self-organise, maximise their assets, resources, and ambitions through processes of creative making by combining knowledge about local place-based heritage with digital fabrication tools. The project utilised the concept of 'living heritage' and worked with minority groups, partners and stakeholders (Craftspace Birmingham, Creative Black Country West Midlands, Fab Lab West Bromwich, and Terra Vera Slovenia);
- S4S was an ARHC Research Grant funded project in collaboration with University of Exeter. It ran from November 2017 to June 2019, with GBP179,791 (of GBP450,000) going to CADRE. The project combined social science and arts methodologies to explore how working creatively in community groups to repair, repurpose, up-cycle, and adapt clothing might change attitudes, building a community of 'sustainable clothing citizens'. Evidence of the impact of the work of the project can be seen at 4b), deriving also from 3b) below. Partners included: Fashion Revolution, Hive Shrewsbury, and the Black Country Living Museum;

- HMP Grendon/Ikon Gallery Artist Residency 2019-2022, GBP114,000. Kelland is Ikon's artist in residence at HMP Grendon, Buckinghamshire. Funded by the Marie-Louise von Motesiczky Charitable Trust, the focus of the residency is the development of artistic practice at HMP Grendon – that of Kelland and of the prison's communities. For Kelland, the relationship between artist and prison is an exchange of ideas and practices, an ongoing dialogue that informs all aspects of the residency;
- Marc Fassiaty Foundation awarded P.Harrison with a production commission of GBP18,000 in 2018. He was also awarded a commission of GBP12,000 in 2015 from Bristol Museum and Art Gallery/New Expressions;
- Kossoff was awarded GBP25,000 by Arts Council England for his film 'Animal Architecture', 2015;
- Altintzoglou was given gallery support of some GBP8,200 (EUR10,000) for his 'Grand Detour' exhibition at Beton7 Arts, Athens, in 2016. He was also awarded with GBP5,000 from Arts Council England for 'Sunbeam' shown in the 'Making of Mordor' exhibition at Wolverhampton Art Gallery in Autumn 2014;
- Glaser received GBP250 from the Bibliographic Society to speak at a conference on 'Prints Progress in the 20th Century'. She was also awarded with GBP500 from the Printing Historical Society for a research trip to Cambridge University Library;
- Moore collaborated with scientists on a project funded by the Wellcome Trust Large Arts Award with Garfield Weston, GBP150,000 2015-2016. For her 'Bloomers' film 2019 she was supported with GBP47,000 from Klangforum, Arts Council England and Animate Projects; and
- Sherwin was awarded GBP6,000 from Arts Council England and the Sasakawa foundation for his 2016 work 'Paper Shadows'.

It will be noted that there are fewer opportunities for Knowledge Transfer Partnerships (KTPs) than in REF2014. We have, in consequence, sought out other avenues, re-focusing our gaze towards European funding and partnerships to extend our international reach. As will be seen in the next section, this has necessitated central University support arrangements.

b) Organisational Infrastructure Supporting Research and Impact

University Research Support services are divided between three departments: Project Support Office (PSO) which focuses on pre- and post-award project support and management, the Research Policy Unit (RPU) – for university-wide research policies and support and the DC – for PGR students. All are based in a central Research Hub, which coordinates research support across the University. The central Finance Department provides financial function across all Faculties and departments as relevant. We have also benefitted from a Research Assistant to work with our Professors, and a dedicated Impact Officer based in RPU.

CADRE staff and doctoral students are able to utilise the art school's studios, materials and technicians. Staff and doctoral students can also seek support for research-specific equipment and specialist technical support in addition to that available centrally within SoA and the wider University such as an advanced laser cutter, motion capture technology or 3D printer training. For example, it was of critical importance that our S4S project could acquire the physical studio space to repair, repurpose, up-cycle, and adapt clothing for us to be able to deliver the project. This, in turn, enabled us to be able to fulfil the impacts of co-creating new forms of artistic expression and of having a beneficial effect of the environment. For a full explanation of the impact created, see 4b), below.

c) Research Infrastructure: The nature, quality, provision and operation of specialist research infrastructure and facilities

CADRE staff and students benefit from the University library, which subscribes to a broad range of journals, networked electronic resources and full-text databases including those specific to art and design. For our students, we have improved their facilities when the CADRE PhD study room in the art school building was no longer adequate for our growing cohort. We therefore expanded our PGR facilities from a dedicated room with six hot-desks and lockers, and now offer an additional large 'Postgraduate Studies' room shared with the school's Master's students, offering twelve more hot-desks, a kitchen, social space and presentation audio-visual equipment. This has the added value of enabling our MA students to see doctoral work in progress and encouraging them to think about their own potential research future.

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

a) Arrangements and Support for, and Effectiveness of, Research Collaborations, Networks and Partnerships

The Unit has been successful due to its collaborations and every member has an extensive network of research collaborations and research partnerships. A good example of this is the work of D.Harrison in the international MinD project. Given the health dimensions of the project, we also worked with professional health partners (the Nottinghamshire Healthcare Trust, Intrax (Spain), Zorggroep Sint Maarten (Netherlands), Alzheimer Europe, and the Alexianer Klinikum Berlin). These research collaborations underpin the success of the project and show how effective these relationships can be.

b) Relationships with Key Research Users, Beneficiaries or Audiences

The staff in CADRE have engaged with and developed a relationship with key research users, such as the AHRC-funded S4S project. The project combined social science and arts methodologies to explore how working creatively in community groups to repair, repurpose, up-cycle, and adapt clothing might change attitudes, building a community of 'sustainable clothing citizens'. The research resulted in policy recommendations. The project worked with charities, community organisations, sole traders, and micro businesses in the Midlands (including collaboration with the EU-funded EnTRESS project at the University of Wolverhampton), and in Cornwall to explore how sustainable clothing thinking, behaviour and practices might be embedded in their organisations.

The research resulted in a Select Committee policy recommendation that repair and reuse would: 'improve a business's environmental and social impact but also offer market advantage as they respond to the growing consumer demand for responsible, sustainable clothing.' The full impact became apparent when this recommendation was accepted by the Government in June 2019. This is very strong evidence of impact at the heart of Government sustainability policy on the environment.

c) Wider Contributions to Economy and Society

We are continuing to have a significant impact contribution to economy and society, beyond our impact case studies. A good example of this is Rogers' 2018 Stork – The Welcome Migrant, a social participatory project involving Polish and British citizens in Wolverhampton, based on the migration patterns of the stork in Poland. Rogers installed twenty sculptures across the West Midlands and the project was successful in shaping and informing debate on the definitions of

'home', 'strangers', and 'welcoming outsiders'. In the context of the 'hostile environment' approach to immigration, this impact provided a welcome degree of conviviality to the debate.

With a view to building upon our achievements so far, discussed in the previous section, we note that the House of Commons Environmental Audit Committee is revisiting its inquiry entitled *Fixing Fashion: Clothing, Consumption and Sustainability*. Although the deliberations of the Committee, and associated reporting, are due to take place beyond the census dates of the current REF, we are nevertheless keen to be involved and do all we can to continue to be an essential element in the public debate and, thereby, shape and inform opinion, practice, and policy.

d) Engaging with Diverse Communities and Publics

The Unit engages with diverse communities and publics through its research. This ranges from addresses, such as D.Harrison's keynote address to the 'Black Arts Movement 21st celebration' conference in 2016 held at the University of Wolverhampton, to Kossoff's 2016 film 'How They Hate Us...', released in Ramallah, Palestine. The Black Arts Movement is an important part of our vision. It has a strong connection with the practice-led approach to research and is firmly connected with inclusion and place, which are part of the University's Vision 2030.

e) Contribution to the Sustainability of the Discipline

Both Maker-Centric and S4S are designed with and structured by interdisciplinary research teams and advisors, providing researchers with a unique opportunity to work across disciplines, sectors, and with colleagues in external universities. The Wellmaking project involves early-stage researchers in collaborative work across the design and health sectors, with a cross-sector symposium and an AHRC-Catalyst funded workshop at the Wellcome Collection in London in 2017.

In 2019, an Arts Council/Engage-funded Museum University Partnership Initiative (MUPI) offered ECRs and PGRs opportunities to engage in knowledge exchange with designers, academics and museum professionals in the Midlands. Participating museums were the Herefordshire Museum Service, Black Country Living Museum, Herbert Gallery Coventry, and the Ironbridge George Trust. These museums and partnerships contribute to sustainability by increasing the grass roots coverage available to the Unit and integrating new approaches over time. With greater collaboration, the longevity of our work is guaranteed.

f) Indicators of Wider Influence

The Unit has had a number of indicators of wider influence and contributions to and recognition by the research base. Select exemplars include the following:

Journal editorship

Our most prominent editorships are that D.Harrison is a current member of the editorial board and reviewer for *the International Journal of Art, Culture and Design Technologies* (IJACDT) and that Doyle is the Editor of *the Journal of Virtual Creativity*, and *the International Journal of Performance Arts and Digital Media*, and has peer reviewed for the Journals of: *Metaverse Creativity*; *Philosophy Transactions of the Royal Society*; *Leonardo*; and *Craft Research*. Roberts is a member of the advisory board for the following journals: *Philosophy of Photography* (from 2009); *Art and the Public Sphere* (from 2009); *Third Text* (from 2007 to 2016); *Historical Materialism* (from 1998); as well as the prestigious *Zeitschrift für Kunstgeschichte* (from 2018).

Participation on grants committees

D.Harrison sits on the Scientific Committee of the World Multidisciplinary Art Sciences Symposium, is an evaluator for the Social Sciences and Humanities Research Council of Canada and previously within this REF census has been an AHRC peer reviewer for Panel B Visual Arts.

Fellowships

CADRE's two-year Marie Skłodowska-Curie Individual Fellowship funded through Horizon2020 in the APSP cluster accommodated Dr Ketu Chukhrov's project concerning Epistemological Gaps in Cultural Theories of the Soviet East and the Democratic West in the 1960's and 1970's. Rogers is a Fellow of the National Co-ordinating Centre for Public Engagement, Bristol, and Penzin is an Associated Research Fellow at the Institute of Philosophy, Moscow.

Prizes

Our film-makers and animators regularly receive prizes for their work, most notably Moore's animated film 'Loop' won the prize for Visual Science at the Image Science Festival in Abu Dhabi 2017, and second place in the Professional Documentary under ten minutes category at the Raw Science Film Festival where it received a special mention. The film also won Best Animated Documentary prize at the Factual Animation Film Fuss 2016. Her film 'Bloomers' has been nominated for Best Short Film at the British Animation Awards 2020 (BAAS). Bloomers also won Best British Film at the London International Animation Festival 2019 and Best Documentary at ReAnima International Animated Film Festival 2019.

Membership of Research Council or similar national and international committees

Although some staff members have left, they were assiduous in their academic responsibilities while in the Unit. Hackney, D.Harrison, and Niedderer have all been AHRC Peer Review College Members over this REF period, and Hackney and D.Harrison are AHRC Panel Reviewers and Fellows of the Royal Society of Arts. Hackney is a Design History Society member and officer of the EU Design Days. Moore is on the Wellcome Trust Arts Selection Committee.

Invited keynotes, lectures and/or performances, or conference chair roles

D.Harrison was an invited panel speaker for the CAA conference in Los Angeles 2018; and theme leader with five panels of five speakers each for the EVA/Politics of the Machine conference in Copenhagen 2018. She was also the Invited speaker at 'Consciousness Reframed 16', at Shanghai University in 2016. D.Harrison also presented as Visiting Arts Professor on an invited lecture tour to the Universities of Changsha, Hunan; Hunan University of Science and Technology, Xiangtan; Jilin College of Arts, Changchun; Northeast Normal University, Changchun; Tsinghua University, Beijing over the course of winter 2016.

A similar high standard of excellent international engagement has been shared by other members of the Unit. Roberts was the invited speaker at Brussels Centre for Fine Arts and has given keynote addresses at the symposium at Hebbel am Ufer Theatre, Berlin; and the Russian Formalism Group workshop, at the University of Westminster. Closer to home, Penzin delivered keynote talks at the symposium "A Bright Night: Technologies of Affect" at Serpentine Gallery; Tate Liverpool 14 October 2016 and at the Ruskin SoA, at the University of Oxford.

Refereeing academic publications or research proposals

In terms of publications, CADRE members peer review for 17 journals including Roberts for *Comparative Literature and Culture*; Doyle for *Leonardo*, and Niedderer is the founding editor and a reviewer for *the Journal of Craft Research*. Altintzoglou was the founder and editor for the PGR online journal *Desearch* (2014-17). Staff review for seven publishers including D.Harrison for Bloomsbury, Penzin for V-A-C Foundations, and Hackney for Oxford University Press. Its members sit on the Editorial teams reviewing for 14 Journals including Penzin for the Institute of Radical Imagination, *Moscow Art Magazine*, and Niedderer for *Journal of Visual Art Practice*.

Niedderer also reviewed proposals for the Global Challenges Research Fund (GCRF), while Fenton reviews grant applications to the Marie Skłodowska-Curie fellowship scheme, and Moore reviews applications to the Wellcome Trust.