

Institution: University of York
Unit of Assessment: 33 - Music, Drama, Dance, Performing Arts, Film and Screen Studies (B – Theatre, Film, Television and Interactive Media)
<p>1. Unit context and structure, research and impact strategy</p> <p>1.1 Unit Context and Structure</p> <p>The Department of Theatre, Film, Television and Interactive Media (TFTI) was founded in 2007 and made its first submission to the REF in 2014. At that time, TFTI was a nascent research unit, necessarily concentrating on developing robust degree programmes and recruiting high-quality staff. This was reflected in its return of 14.5 FTE staff, the absence of any research groups, seven completed PhDs and research income of less than £100,000 over five years. TFTI has achieved much between the previous and the current REF. We are submitting almost double the staff (27 FTE); have increased doctoral completion by a factor of over 470% and our research income to 2019/20 is £4,685,215, an increase of over 4,700%; and have set up five research clusters. This template will set out how TFTI has established realistic strategies and rigorous processes for the promotion, development and support of internationally excellent research, and how it plans to sustain that work.</p> <p>TFTI is itself an innovative unit, formed to foster significant, cutting-edge inter- and cross-disciplinary research between and beyond Theatre, Film, Television, and Interactive Media (IM), as well as to enable the disciplines themselves to generate internationally excellent outputs, impact and strong research income. The Department's structure is predicated on the concept of media convergence, the connection of performance forms and technologies through the increasing digitization of media. Its specific media domains also span wider disciplinary endeavours and methodologies associated with arts and humanities, social sciences, and science and engineering. TFTI hosts funded projects that address research questions of cultural value, agrifood, gig-economy workers' rights, and TV production that allows viewers to influence their programmes' content.</p> <p>As time has progressed, the Department's research identity, focused through its interdisciplinary combination of specialisms and the reciprocal dialogue between theory and practice (e.g. all three ICSs feature practice-as-research outputs), has increasingly established itself as distinctive nationally and internationally, with particular strengths in digital creativity, industry-facing storytelling technologies and the interactive performance industry (4.1 and 4.2). At the same time, scholars in Theatre, Film and TV have made major contributions to the studies of their disciplines' histories, legacies and production practices. For example, Theatre research has explored acting on TV; Film and TV research has led the development of cinematic virtual reality; and IM research has engaged with immersive performance.</p> <p>Staff are primarily encouraged to work on projects that are driven by their own curiosity, existing partnerships, specific grant and impact opportunities, and invitations from new partners. As such, these activities generated significant outputs and major grant success, while attracting more PGR. In addition, in 2019-20, the Department established five research clusters with the intention of building on existing and promoting further interdisciplinarity. The clusters cover acknowledged areas of strength (Cultural Histories and Legacies; Immersive & Interactive Storytelling; Performance & Production Practices & Context) and proactively seek to develop emerging areas (Digital Cultures; Health, Wellbeing and Accessibility). They are open to all academic staff, PDRA and PGR. This inclusive invitation helps integrate the latter two constituencies into our research community, which is a strategic aim (1.2). Due to the clusters' relative youth, their work is still in progress, but each one has met on several occasions, a reflection of the dynamism and commitment from their 43 members.</p>

1.2 Strategic Aims for Research

Overall, TFTI's strategic aims for REF2014 were based on a process of initial development, establishing a research environment that could nurture excellent outputs, grow PGR and grant income, and engage with the new category of impact. The Department is now in a phase of expansion, and the aims of the Research Strategy reflect this:

1. to enable and encourage researchers to do their best work (1.2.1)
2. to co-create (across disciplines and with external partners) world-leading interdisciplinary research and impact (1.2.2)
3. to develop further impact, knowledge transfer and collaborative partnerships (1.2.3)
4. to sustain and further develop a healthy grant culture (3.1 and 3.2)
5. to make postgraduate research students an integral part of its research culture (2.4 and 2.4.1)
6. to further embed Equality, Diversity, and Inclusion (EDI) into all its research processes and policies (2.2)
7. to furthering open science in a fashion that fits the specific needs of its research fields (1.4)
8. to respond pro-actively to environmental change in the research landscape (1.5)

These aims not only apply to current strategy, but will also underpin future aims. Their inclusive nature allows for more specific aims to emerge over time, potentially with greater definition (e.g. to maintain national or international leadership in EDI in the screen industries and object-based media – 4.2). TFTI will also seek strategically to bolster the Research Clusters in order to optimize interdisciplinary research, impact and grant income.

1.2.1 Research Excellence

TFTI has implemented policies and procedures to enhance and promote the quality of its research, and these started with the Research Mentorship scheme, which is now well embedded and vital to the development of excellent research. Each member of staff on an Academic Research & Teaching contract is assigned a Research Mentor, regardless of their seniority and experience. Mentors discuss research plans and objectives, set out in a three-year plan drafted by the Mentee. They also assess research outputs, pre-submission, in order to enhance their quality. These outputs are assessed again once they are published (in the broadest sense of the term): two assessors from TFTI report on the quality of the work annually. Mentors then return the reports to the Mentee as a way of engaging researchers with constructive, future-oriented feedback.

Researchers work to the Department's Research Expectations, which cover outputs, grant applications, impact expectations and conference organization and participation. These Expectations are discussed during Mentorship meetings and, more formally, in the Performance and Development Review (PDR) process. They are designed to be realistic while fostering excellence and development. An underpinning principle is the emphasis of quality over quantity: the expectation for high-quality outputs is at least one per academic year.

1.2.2 Interdisciplinary Research

Interdisciplinarity is a function of TFTI's unique disciplinary make-up. Inside the Department, there are various ways in which interdisciplinarity is promoted. The new Research Clusters attract staff, PDRA and PGR from TFTI's disciplines and foster collaboration under inclusive themes. A regular Research Seminar series runs, on average, three times per term. The seminars allow both external and internal researchers to engage an audience in sessions that specifically highlight interdisciplinary research (e.g. papers on mobilizing workers in the creative industries or on the interplay of cultural value and digital media).

TFTI also introduced the Research Incubator forum in 2018 that runs three times a year with two presenters at each session. The Incubator invites all staff to discuss their ideas for a research project at a very early stage and solicit responses and thoughts from colleagues across the Department's disciplines.

Collaboration and partnership are also facilitated and nurtured by colleagues' expertise and professional connections. TFTI's medium size and single-building location encourages informal exchanges between researchers so that Research Mentors can easily point their Mentees to the correct colleague(s) for further discussion. Such relationships support new applications through the transfer of successful grant-writing practice within the Department.

These internal structures, designed to facilitate interdisciplinary research beyond the Department, have certainly borne fruit (4.2). TFTI's major grant applications and successes are predicated on interdisciplinarity, collaboration across departments and faculties, and with external partners, especially in the field of digital creativity (4.2 and IES §11).

1.2.3 Impact and KT

TFTI has a number of strategies in place to expand impact activities:

- i. It created the post of Impact Officer in 2015, and this person is responsible for promoting and developing impact across the Department; sharing good practice through engagement with (teams of) researchers; curating the annual Impact Event; sitting on the Departmental Research Committee (DRC) and the Faculty Impact and External Engagement Committee; and supervising the development and selection of Impact Case Studies (ICSs). The annual Impact Event provides both a showcase for existing impact activity and organized targeted sessions, such as one on the use of website analytics to demonstrate external engagement with research findings.
- ii. The impact component in grant applications is reviewed prior to submission by the Impact Officer and members of DRC. Impact is also one of the Department's Research Expectations as an aspect that is central in this outward-facing department. Research Mentorship and PDR ensure that impact is always a point of discussion when relevant to a researcher's project.
- iii. The Impact Officer and DRC also play a vital strategic role in identifying and developing ICSs. The three selected ICSs (Performing the Jewish Archive 3.3.1 1iv; Weavr 4.2 1iii and Object-Based Media 4.2 2i) had been carefully evaluated for their potential to generate impact. DRC put PtJA and OBM forward for additional internal impact funding and actively supported PtJA's application for AHRC Follow-On Funding (all three funding bids were successful). Taken together, the ICSs reflect the contributions made by TFTI's research to culture, society and the economy. Each sector is clearly present: impact arises from actively working with non-academic beneficiaries and enhancing their current offer, be they art administrators and Holocaust educators, an international esports corporation, or national broadcasters and film-makers.
- iv. TFTI has also established an Industrial Engagement Committee that draws on the experience of running four Knowledge Transfer Partnership projects and of attracting major interdisciplinary funding (3.1, 3.2, 4.1 and 4.2). It offers best practice, collective and individual advice, mentoring, and help when seeking new partners or furthering work with existing ones. One of the most impactful projects in TFTI's portfolio is the Screen Industries Growth Network ([SIGN](#)). This is focused on increasing capacity in the TV, film and games industries in the Yorkshire and Humberside areas through research and training, and is built on in-house expertise in industry engagement and impact.

1.3 Integrity

Research integrity is supported by TFTI's in-house Ethics Committee (EC). This sits termly, and its members assess individual applications for ethics approval within two weeks. EC is fully GDPR compliant and can consult the Arts & Humanities Ethics Committee and the University (IES §14) whenever necessary. EC's processes, application forms and supporting documentation are published for all staff and students on the TFTI VLE.

1.4 Open Research

TFTI is committed to open-access publishing and works to ensure that its fees are included in grant applications where possible. In addition, through University Research Committee and the Standing Conference of University Drama Departments, DRC Chair Prof. Barnett has advocated and lobbied for policies that acknowledge the special position of A&H in OA, with particular emphasis on issues surrounding fees for OA monographs and the need to make the CC-BY-ND licence the default for A&H researchers.

The Department has also encouraged research projects to disseminate their findings in an accessible way through websites. URLs such as <http://brechtinpractice.org/>, <http://enhancingaudiodescription.com/>, <https://jewishmusicandtheatre.org/> or <https://www.tellingthebees.buzz/> offer visitors extensive resources and insights into the underpinning research in an accessible form. The experience of developing research websites can be passed on, and they demonstrate how researchers may address non-specialist beneficiaries without 'dumbing down' content or the projects themselves. (IES §15-17 for University policy).

1.5 Sustainability and Future Strategy

As our developments show, existing strategies are performing well and leading to concrete results of which the Department is proud. Future developments will thus build on the strong foundations identified above. DRC reviews all research strategies and policies annually, seeking to develop them in the light of the changing research landscape and TFTI's own progress. The establishment of the Industrial Engagement Committee in 2018 is a clear example of how the Department has grasped the opportunity of the government's Industrial Strategy and sought to engage with it as fully as possible. Regular reviews of processes, such as the effectiveness of the Research Mentor Scheme, the new Research Clusters or the outcomes of the Annual Review of Research Outputs, similarly seek to improve existing ways of working and develop new approaches where appropriate. On a larger scale, TFTI is currently drafting a strategy to consider how it can sustain the impetus of its large research projects (such as [Digital Creativity Labs](#), [Weavr](#) and [XR Stories](#)) once their main funding has ended. Already, for example, Weavr has expanded its remit beyond esports through a KTP with PA Media. These are all pro-active discussions, designed to further the upward trajectory of TFTI.

In the light of the global pandemic, DRC has actively engaged the eighth point in its Research Strategy (1.2). It has maintained the staff Research Allowance (2.3), convened a 'Research Check-In' and a 'Research Lounge' as fora for researchers to share their work within the Department and to discuss their plans for research over the summer under the new circumstances, respectively. TFTI also initiated a series of seminars, 'TFTI Un-Cancels Your Conference Paper!', allowing staff to present and discuss work, even when their original conferences were no longer able to.

2. People

2.1 Staffing Strategy and Development

As already noted in Section 1, TFTI has expanded greatly since the last REF. It is submitting 86% more staff to this REF and is now a maturing, medium-sized research unit. The expansion was planned and based on achieving solid UG and PG recruitment, and this illustrates the reciprocal relationship between teaching and research. Staff growth has taken place across TFTI's four disciplinary fields (Theatre, Film, TV and IM), and the greatest increase has been in IM, whose UG degree programme was launched shortly before the last REF. IM has also seen the greatest growth in grant income (3.1), which has helped drive PDRA and IM staffing.

Staffing strategy has emphasized recruiting new blood while retaining senior positions and the experience they bring with them. In IM, for example, there have been four appointments at lecturer level and one at professorial level.

The Department's successes in securing large grants has also played a key role in its appointment strategy. Two research fellows (one lecturer, one reader) who were initially

employed in the Digital Creativity Labs project are to become open-contract Research & Teaching staff in IM in January 2021, as strategically planned. The XR Stories project has also appointed two research fellows (both lecturers) who will follow a similar career route. Such a pipeline ensures a focus on research before the colleagues take up their other responsibilities. Indeed, the DC Labs fellows have already been involved in major research initiatives: the lecturer (Dr Block) is spearheading the Weavr project (4.1), an Innovate UK 'Audience for the Future' scheme, as the director of £5.8M R&D thread; the reader (Dr Deterding) is the Training Director of IGGI2 (2.4.1).

All staff have a Research Mentor and are part of the PDR process (1.2.1). These twin schemes mean that the transition from Research-Only to Research & Teaching posts are managed seamlessly, while guaranteeing continuity of research focus for all.

2.1.1 Early-Career Researchers

Early-career researchers (ECRs) are understood as becoming REF eligible after 1 August 2016. When appointed as either Research & Teaching or Research-Only staff, they are subject to a two-year probation period, supervised by the Head of Department who is responsible for their induction, development and transition. This involves meetings at the beginning, at twelve months and twenty-one months that agree objectives and review progress. After the successful completion of probation, Research & Teaching lecturers may benefit from the possibility of Research Leave (see 2.3) after their second year at TFTI. This generous provision acknowledges the need to devote time to research after the pressures of teaching new modules for two years.

TFTI also has a community of PDRAs, attached to the larger funded projects. They are subject to the terms of the Concordat to Support the Career Development of Researchers (IES §27-8) and their interests are promoted and overseen by the Department's Director of Postdoctoral and Postgraduate Research. PDRAs also have access to the staff Research Allowance (see 2.3), are invited to all research events, and have a representative on DRC. Their career paths are guided by the respective projects' PIs. Of the fifteen PDRAs employed, seven are still in post and eight now hold either academic or industry posts.

2.2 Equality and Diversity and Inclusion Policies

TFTI's Equality and Diversity Committee (EDC) sits regularly to ensure that E&D is firmly embedded in the Department, its policies and procedures. The chair of E&D is also the Director of Staff Development and sits *ex officio* on all major committees, including DRC. The chair of DRC and the Head of Department review the changing make-up of that committee to maintain E&D. Representatives from ECR staff and our PDRA community sit on DRC, widening inclusion and soliciting their views and perspectives on the issues under discussion, including the implementation of the Concordat to Support the Career Development of Researchers (IES §27-8 and §35-7 for University E&D strategy).

Since the census date for REF2014, TFTI has appointed twelve new lecturers (six women, six men), one replacement lecturer (one woman), one new professor and one replacement professor (both men). These figures represent approximate gender parity in appointments, although, as has historically been the case, men have still taken the most senior positions. 37% of Research & Teaching staff are women, and there is an emphasis on ensuring that opportunities for promotion are pro-actively encouraged in order to develop existing staff and address the imbalance.

EDC has sought to address the asymmetry in promotion applications and success in terms of gender and ethnicity. Consequently, all staff are inclusively invited to submit updated CVs annually; there is a briefing meeting prior to the opening of the annual promotion round; and in-house training is given to all PDR reviewers to allow them to identify strategies that will lead to promotion applications. The Department's Promotions Committee examines all applications with a view to making them as robust and effective as possible. Consequently, since the Committee's establishment, every application for promotion has been successful: fifteen researchers have

been promoted: seven women (including one BAME colleague and TFTI's first female professor) and eight men.

Additionally, measures have been taken to make the wording of new job advertisements equally welcoming to all potential constituencies and to provide appropriate gender balance on all appointing panels. There is statutory University training for all chairs of appointment committees, and each member of staff completes an extensive online E&D training module, refreshed every two years (IES §19 and 21 for University E&D provision for appointments). Most recently, two new posts in Film and TV included four women, three of whom were BAME, and one BAME man in two five-person shortlists.

Timetabling and scheduling has also been positively affected by inclusive initiatives. Roughly a third of the thrice-termly Research Seminars are given lunchtime spots. Additionally, the Research Incubator is scheduled during normal working hours, three terms a year.

In terms of selecting outputs for the REF, quality is the defining factor. Yet where outputs have been rated equally, selection has been based on principles of EDI, e.g., if men were overrepresented, a woman's output took precedence.

The Department is applying for an Athena SWAN Bronze award and has included all the initiatives, above, in its application.

2.3 Developing Research Staff

All research-active staff benefit from various types of support from the Department to develop them as high-quality researchers (1.2.1).

1. Researchers can apply to the Research Leave Scheme in two forms: one term after six taught or two terms after nine taught, when working on a larger project. DRC considers each application and clearly sets out the kinds of work expected in the application form (including grant writing and impact activity) in order to keep applicants' ambitions realistic and to minimize resubmissions. This process ensures proper scrutiny and openness for all research leave applications. Reports on the work done during a period of leave are submitted to DRC for approval in the term after the leave has taken place. The presence of the Chair of E&D is designed to ensure that all applicants are treated transparently and fairly.
2. All researchers have access to a £1,000 Research Allowance per academic year for research expenses. Exceptionally and budgets permitting, researchers can request a one-off 'big ticket' item from DRC, usually a costly international conference. This provision acknowledges the high prices of international travel, fees and accommodation as well as the necessity for colleagues, particularly in IM, of speaking at such events. At most prestigious IM conferences, acceptance to present *also* implies publication in their proceedings due to the pre-submission and peer-review of the paper, and so funding here contributes to research outputs. In terms of inclusivity, PDRA and fixed-term staff also have access to annual funding (£500) to attend conferences, giving them a platform to present their research findings, receive feedback from an interested and expert audience, and network.
3. Researchers may also apply to the Department's Conference Fund in order to support conferences they plan to organize. The fund seeks to promote research at TFTI or at other venues at the University of York in the case of interdisciplinary events. It has granted seventeen applicants funding for conferences and symposia in this REF cycle at an average spend of £1640 per event.

2.3.1 Safeguarding Researchers' Time

All research staff are included in the Department's Workload Model, which divides staff time into 40% teaching, 40% research and 20% administration/academic citizenship. Due to the realities of academic life, mechanisms are in place to ensure that any disparities in the ratios are addressed on an annual basis in a bid, before anything else, to protect the research element of the calculation from the obvious pressures of the other two. The Workload Model also has a

provision for ICS leaders, so that they may dedicate specified time to developing and evidencing their impact. Additionally, TFTI has instituted a £10K fund to provide quick teaching relief for researchers involved in 'short-notice' major funding calls. The criteria for approval are based on researcher specialism and an appraisal of likely success.

2.4 Provision for PGR

Since the academic year 2013/14, TFTI has invested £223,257 through its own in-house bursaries, sponsoring seven doctoral students. The sum reflects the need to increase PGR numbers in a young department and to signal its growing supervisory expertise. This attractive package has had the desired effect in that it has drawn more PGR to the Department and helped enlarge the PGR community.

The University of York is also the lead university for the White Rose College of the Arts & Humanities (WRoCAH), an AHRC-funded Doctoral Training Partnership. It was ranked first in the country in the first round of funding (Oct 2014-Oct 2018) and received £19M for five cohorts. TFTI has secured eight WRoCAH Studentships in a highly competitive field over the course of the DTP's first incarnation. Further national success in the second round, that began in Oct 2019, has secured £14.2M for a further five cohorts, with 50% match-funding provided by the participating universities (York, Leeds and Sheffield) for 80 four-year studentships.

TFTI is also a part of the EPSRC-funded 'Intelligent Gaming & Game Intelligence' (IGGI) Centre for Doctoral Training (CDT), hosted by the Department of Computer Science (CS) across four universities and funded at £5.5M. At York, CS provides all students with specialist doctoral training, space and equipment. TFTI's research expertise in human-computer interaction in general and gamification in particular means that the Department provides primary supervision for eight students. IGGI2, the extension of this successful CDT, is now bringing £6M to the University. York and another university will share 60 doctoral students over the course of four years. TFTI is guaranteed at least six students and is contributing an additional two IGGI2 scholarships over the duration of the project.

TFTI's significant involvement and success in both AHRC and EPSRC doctoral funding reflects the Department's interdisciplinary credentials. That funded students work side-by-side in TFTI's PGR community also fosters dialogue between disciplines and enriches the students' overall experience.

Consequently, TFTI's postgraduate community is growing, with 71 new doctoral students registered this REF cycle. The Department offers doctoral degrees that result in submitting a traditional thesis or a combination of creative outputs and a shorter thesis. Such options mark a commitment to the many forms of practice-as-research (PaR) that are appropriate to a department specializing in the dialogue between theory and practice, and that has the facilities to promote them (3.4). PGR on this degree pathway have produced films, play scripts and software to the high standard stipulated by external examiners, something that also develops staff skills in supervising PaR.

Since 2016, TFTI has additionally offered Masters by Research in all its disciplines with two explicitly developing aspects of practice (MA by Research in Screenwriting and Filmmaking), although the MSc by Research in Interactive Media and the MA by Research in Theatre do not preclude assessable practice-based outputs. This pathway provides a route to doctoral study by offering a one-year experience of advanced research.

Each doctoral candidate has supervisions every 4-6 weeks, with schedules managed in the University's Skillsforge software. Students present work twice yearly at a Thesis Advisory Panel (TAP) and a Progression Board that incorporates the second annual TAP (IES §31). This mechanism ensures regular assessed submission of material, in the form of written or practical outputs. The system helps to ensure that candidates are on track and producing work that is appropriate for their stage of study.

TFTI hosts its own annual Postgraduate Symposium where students are invited to present their research and during which all our first year PGR Students are required to deliver a 15-minute talk about their research as part of their first progression point.

TFTI offers all PGR students £250 per year to spend on research expenses. This sum can roll over from year to year in order to accumulate into a large aggregated total. This facility has proved helpful when students choose to speak at a conference later in their studies. The provision also exists to fund students for a one-off 'big-ticket' conference in a similar way to the funding of departmental staff. In addition, where projects require the production of an artefact such as a film, piece of software or a performance, students can also apply for additional support of up to £390 to support this activity.

2.4.1 Supporting and Training PGR

PGR training takes place in supervisions themselves by developing good practice, research ethics, methodological and bibliographical skills. PGR are also invited to and final-year PGR present at the Research Seminar series. Thematically focused training sessions and courses are comprehensively provided by the Faculty's Humanities Research Centre (HRC, 3.3.2) and by the University's Research Excellence Training Team (RETT, IES §32). The HRC's Deputy Director is responsible for the extensive PG programme. It covers writing and publishing, career development, research ethics, and collaborative interdisciplinary research grants. RETT provides additional training across the faculties in the following overarching areas: careers and employability; collaboration, partnerships and impact; legal and ethical research compliance; managing research; public engagement; teaching and demonstrating; and written communication and publishing. The HRC and RETT forge bonds across the Faculty and the University, opening up intellectual and social opportunities beyond TFTI. RETT also invites PG students to complete a 'Thesis Needs Analysis' in order self-reflectively to assess the current level of performance and identify areas for development. This forms a part of a 'Professional Development Plan' that can help students consider the skills, behaviours and attitudes they want to develop over the course of their studies.

WRoCAH also provides an integrated training programme, which follows the development trajectory of our researchers, with a welcome event and student conference, training planning day, and three annual colloquia for all cohorts. The College offers twelve training sessions per academic year, and these include public policy engagement, fast-track impact, oral histories, finding and using media resources in your research, podcasting, well-being, and storytelling. Space permitting, these sessions are also open to all A&H research students.

WRoCAH students can also apply for discretionary funding for primary data-gathering, training and conference attendance, student-led fora, and knowledge-exchange projects. All WRoCAH students are required to undertake a Research Employability Project with an external partner. From 2019, all new WRoCAH students are required to undertake an internationalisation project, focused on disseminating research beyond the UK. In short, the WRoCAH community is a dynamic and active one, and TFTI's WRoCAH students gain greatly from the College academically, professionally and socially.

The HRC also sponsors a doctoral and a post-doctoral Fellowship programme that provides working space in the HRC and a grant for research expenses. TFTI has secured six doctoral and four post-doctoral fellows since 2014. There is also an annual poster competition designed to encourage outward-facing research communication. TFTI PGRs have secured first (2020), second (2016 and 2015) and third place (2015) and one high commendation (2017) at this fiercely competitive event.

Both TFTI and the HRC foster PG community cohesion through a range of social events. The Department hosts two events per academic year, while the HRC holds a regular series of events, run by PG students.

3. Income, infrastructure and facilities

3.1 Research Income Strategy

TFTI's uniquely interdisciplinary character shapes its successful and diversified income strategy. The Department has steadily built its research income, peaking with annual income in 2019/20 of £2,184,892. This strong performance matches the considerable increase in income over the REF cycle.

DRC, through the approval of Research Leave, the £10K Buy-Out Fund, the PDR and Research Mentoring Processes, has sought to take full advantage of the Department's interdisciplinary mix of subject areas in order to maximize a diversity in funding. As a result of this strategic decision, the Department has won and/or played significant parts in six major awards: MeCETES (€1m, HERA), [DC Labs](#) (£4m, EPSRC), [SIGN](#) (£4.7m, Research England Development Fund), [Transformation and Tradition in Sixties British Cinema](#) and [XR Stories](#) (£665K and £5.8m, respectively, AHRC) and [Weavr](#) (£5.8m, Innovate UK). Funding has also come from The British Academy, the Wellcome Trust and the ESRC. Additionally, TFTI has secured four Knowledge Transfer Partnerships with Mercedes-Benz, Green Screen Productions, Wild Rover Productions and PA Media (4.1 and 4.2). As such, TFTI can demonstrate that it is not dependent on any single funder, and secures grants for a wide variety of projects that span interdisciplinary divides between the arts, humanities and sciences.

The Department's Impact Strategy can also be felt in its awards. As well as winning funding for a healthy mixture of large and smaller projects, all with substantial impact activity, TFTI staff have extended their own research through impact-related funding, primarily in the form of AHRC Follow-On Funding for Impact and Engagement. 'Gido's Coming Home!', 'Hacking the Bees' and 'Brecht in Practice' extend the reach and significance of their originally AHRC-funded research. In terms of E&D, two women and one man are PIs on these projects, respectively. This experience of impact-related funding success augments the Department's pool of expertise in supporting applications, and develops grant-writing expertise.

TFTI recognizes that while grant success is to be celebrated, those unsuccessful and/or who have not applied require further encouragement. DRC reviews application records annually to identify potential applicants for grants. The Mentorship and PDR schemes, in turn, seek to promote and support applications from as inclusive a pool as possible.

3.2 Research Income: Accounting for Success

There are number of strategic principles and processes that have contributed to the increase in income since the last REF:

1. The recruitment of excellent research staff (2.1). While senior staff have understandably contributed to some of the Department's major projects (e.g. Mediating Cultural Encounters Through European Screens, [Transformation and Tradition in 1960s British Cinema](#), [XR Stories](#) and the [Digital Creativity Labs](#)), TFTI has seen major success coming from more junior colleagues, too. The Weavr Project, that secured £5.8M for its R&D thread, was awarded to a research lecturer, Dr Block. Three other lecturers have also secured impressive funding. Dr Hook received £101K from the EPSRC for his First Grant on 'Perspective Media'; Dr Peschel was CI on 'Performing the Jewish Archive' (£1.8M); and Dr Lopez received £78K from the AHRC for her 'Enhanced Audio Description' project. These are certainly significant sums for junior members of staff to win.
2. A rigorous review process. DRC supervises the review of all grant applications. Two reviewers assess the viability of the project, taking into account its originality and aims, its schedule, staff involved, impact, costs, cogency and the clarity of expression.
3. Success breeds success. The steady development of successful grant applications builds a critical mass of expertise and experience. In a medium-sized department like TFTI, it is easy for Research Mentors to refer applicants to successful colleagues and to those with other proven expertise.

4. Formal processes to nurture projects. The Department's Research Expectations (addressed in Research Mentorship and PDR) stipulate that each colleague will be involved in grant-application activity at least once every four years. Implementation has led to 47 successful applications for funding (as PI and CI) since 2014. The nature of the activity clearly varies and is person-dependent: senior colleagues are expected to lead larger projects while more junior ones may play the role of CI or bid for smaller grants for which they have a better chance of success.
5. There is also a strategic dimension to grant applications. Preparations for the successful DC Labs, XR Stories and SIGN projects were built on the construction of extensive internal and external networks of collaborators, and close contact with the University's Creativity research theme (3.3.1, IES §4).
6. TFTI has organized a number of mock interview panels for any applicants who pass the first round of any application process for which interview constitutes a major element of the final round. The Department draws on its own expertise, but will also invite specialists from other departments to assemble a broad, experienced panel. As yet, internal and inter-departmental panels have supported the success of three major project grants, [XR Stories](#), [Weavr](#) and [SIGN](#).

3.3.1 Research Infrastructure: Department and University

Research matters in general and questions of strategy in particular are formulated, developed and implemented by the DRC, which is made up of the Head of Department; the Chair of Postgraduate Research & Postdoctoral Research Committee; the Chair of the E&D Committee; the Chair of the Ethics Committee; the Impact Officer; and ECR and PDRA representatives. Its chair is the Department's Director of Research. DRC sits five times per academic year. In order to raise the quality of research and to encourage the development of a lively research community, DRC organizes an annual Research Awayday which usually casts a spotlight on two themes (e.g. impact beyond the REF, preparing for research collaboration, the qualities of 4* outputs, and making research clusters work).

The Chair of DRC is also a member of the Faculty Research Group (FRG, see below), a committee that feeds back to University Research Committee (URC). URC is the University's executive committee on research matters (IES §9).

The University's main contributions to research infrastructure at departmental level are its provision of priming funds and its development of Research Themes (IES §4,10-12).

1. Priming funds are available in a number of forms that include priming for collaborative projects; large capital expenses; priming funds attached to specific Research Themes (see below); and AHRC-aligned impact acceleration funding. TFTI has benefited directly from project priming, Research Theme and impact funding, and indirectly from capital funding, for which it was a funded partner. For example:
 - i. 'Digital Technologies and the Creative Industries', a TFTI PI with the York Management School as partner received £14,298 from University Research Priming (URP) to support interdisciplinary workshops, connect with major players from industry, and develop networks between the University and industry to mount a further bid (which was to become the XR Stories project).
 - ii. 'Staging History at York Theatre Royal' received £2,490 from the smaller fund allocated to the Culture and Communication Research Theme to create a database of history plays performed at the theatre; prepare a report on the archive; use the material for a practice-as-research response to the findings; and foster a closer relationship with our local producing theatre. A year later, it received URP funding (£13,400) to extend its remit and connect with regional theatres. The two grants will support a larger project bid to the AHRC.
 - iii. 'New Paradigms for Creative Expression in Video-Centric Storytelling' was awarded £7,995 from A&H Impact Funding (in addition to £10K from central University funds) to establish a 'community of practice' (with external partners

including BBC R&D), based on the project's radical approach to moving control for video content towards the viewer. This impact-focused application forms a part of the Object-Based Media project, one of TFTI's ICSs.

- iv. 'Performing the Jewish Archive', another TFTI ICS, and an article-length study on embarrassment in gaming benefited from Music's bid to the Strategic Capital Fund for £38,893, for which TFTI was a partner. Music was able to purchase a mobile audience response system that detects audience reactions without the usual recourse to questionnaires.

2. The University has also introduced seven Research Themes, each with a named champion, to promote interdisciplinary research. The establishment of the University's Research Themes promotes interdisciplinary collaboration through non-discipline aligned themes. TFTI mainly engages with 'Culture and Communication' and 'Creativity', although 'Technologies for the Future' features in future plans. XR Stories has been the major beneficiary from a network brought together through the 'Creativity' theme, with specialists from Electronics and Computer Science joining TFTI professors of Film and IM.

3.3.2 Research in TFTI and the Faculty of Arts and Humanities

TFTI is a department in the Faculty of Arts & Humanities. The Faculty convenes five FRGs per year, in which the eight Chairs of the Faculty's DRCs meet to discuss common research issues; share good practice and offer mutual support; respond to University Research Committee's proposals; and formulate its own policies regarding research.

All A&H departments are also affiliated to the HRC, a resource that supports Faculty research in a number of significant ways. The HRC provides invaluable help for researchers seeking funding. Its team includes a Research Development Manager who advises on the many schemes and opportunities available, tailored to the project's needs; a Senior Research Coordinator who prepares budgets and advises on costs; and a Research Coordinator who supports staff post-award. All TFTI's grant applications have gone through the HRC's comprehensive research support.

The HRC's Director supervises the overall running of the Centre and promotes its mission of fostering productive and creative partnerships with academic and non-academic collaborators across the departments. This takes the form of a regular programme of research events, symposia, conferences and meetings; co-chairing the steering committee of the Digital Creativity Labs; and providing space for TFTI's own research events (primarily seminars and conferences).

Impact, engagement and KE are also supported by the HRC through its two 0.6 FTE Impact Managers and its full-time Impact Administrator. The former develop their ongoing impact expertise through research and analysis; advise on the impact sections of grant applications; convene the Impact and External Engagement Faculty Group; facilitate impact-activity training and best-practice-sharing events; are the York Impact Accelerator's fund managers; and assess, feedback on and develop ICSs. The latter supports the evidencing and archiving of impact, offering a vital service for researchers and lightening the administrative load of gathering and cataloguing testimonials, data and other artefacts. All TFTI ICSs have benefited immeasurably from the expert advice and review, and administrative support in gathering evidence.

The Faculty is also developing targeted collaboration between TFTI and Music. In order to facilitate research collaboration, the two departments have canvassed staff for their research interests and organized an event to match researchers and bring forth new projects. One collaboration has already secured internal funding from Health Science's Mind the Gap pot.

3.4 Facilities

The ability to host and support a number of projects is that allows the Department to secure funding and engage external partners. The Department's impressive facilities contribute to grant success, attracting staff, and promoting PaR. TFTI's physical resources foster research excellence through an award-winning building and industry-standard equipment. The £30M TFTI Building was opened in 2010. It contains two major theatre spaces, two TV studios and control rooms, a large soundstage, a digital cinema with 4k projection and 7.1 surround-sound audio, extensive post-production suites (including four acoustically treated dubbing/recording suites) and batteries of computing laboratories. IM has its own research lab, and there is a research office for PGR students. In terms of E&D, the building's design accommodates disabled researchers and students with three lifts to all floors, wheelchair-friendly lighting gantries, and grab-bars in all appropriate places. The Department has also built a breast-feeding space to welcome staff and students with babies.

There is an experienced technical team of eight members, led by the Technical Facilities Manager, that serves the needs of researchers and teachers.

Professional facilities mean that PaR can flourish, with staff and PGRs exploiting the excellent facilities. The building also affords obvious opportunities to work between disciplines. The 'Soundscapes of the York Mystery Plays' project, for example, made use of audio modelling to investigate mobile theatrical performance, and a current PGR project explores ideas of post-truth and modern myth-making in film and live performance.

4. Collaboration and contribution to the research base, economy and society**4.1 Collaboration: Scope and Ambition**

As demonstrated in 4.2, TFTI is in the process of making major contributions to the creative economy of Yorkshire and the Humber in particular and the nation in general. Its research is pushing forward new forms of media, informed by specialists in film, television and theatre working together with those in technical media, artificial intelligence, machine learning, data-visualization and -mining. Partnerships with industry, the third sector and civic bodies further extend the reach of the research work and its impact on the economy and society. Evidence of this can be found in the examples of interactive films, exhibitions or the data-driven narratives generated at esports events: producers and audiences have already been given a glimpse of future cultural outputs for which research by TFTI staff has been indispensable. And as some of the research has produced transferable assets in the form of software, the ability for this UK department to take to the international stage is gaining momentum. The Weavr project, for example, is already global in scale, with esports tournaments taking place around the world and audiences participating from anywhere with access to a broadband connection.

The movement from producing cultural artefacts and the means with which to fashion them, to a plan to transform the cultural landscape of its region represents TFTI's impact agenda: to influence and effect economic and social change.

4.2 Collaboration: Indicative Examples

TFTI's focus on media convergence had led to its generation of and participation in a number of significant collaborations that have had a number of effects in that they have strengthened the research base 1. on a project level, 2. expanded partnerships beyond individual projects, and 3. propelled the Department towards national standing as a locus of research excellence.

1. Project-based work:

- i. TFTI has driven four Knowledge Transfer Partnerships, projects that combine industry input with research expertise. For example, in the case of the partnership with Wild Rover Productions (£210K from Government; £102K from industry – Jun 2018-Jun 2019), researchers in film-making and virtual-reality technology have worked with a major regional content-maker to explore the possibilities of

- 'cinematic VR', a new medium itself. The development of a software 'toolkit' to manage the workflow of such a process is one concrete output that will have a significant impact on a nascent industry.
- ii. In the fields of sound design, audio technologies and film production, 'Enhancing Audio Description' (£78K – Sep 2016-May 2018) partners with advisors from the RNIB, ITV, Sensor Media Audio Description, Dolby and others. Together they investigated alternatives to post-hoc audio description for the visually impaired in order to integrate description into the audio aspects of the making process itself. This project directly addressed groups with protected characteristics and has engaged with them in practical experiments in the development of its outputs.
 - iii. On a larger scale, the two-year Weavr project (£5.8M, including £1.8M in cash funding from the project's partners – Jan 2019-Dec 2020) is one of only three 'Audience of the Future: Demonstrator' bids funded by the government's Industrial Strategy Challenge Fund, and it is also an ICS. This project represents a major response to a national priority, the expansion of the UK's esports industry. TFTI is responsible for R&D, having extended its existing partnership with the world's largest esports firm, ESL. Weavr is developing and trialling software that transforms the viewer's experience by personalizing gaming output. As such, the project develops storytelling for the virtual spectator, an outcome that will revolutionize the experience of an already global audience. The project brings together the market leader; a proven centre of research excellence in data visualization, AI, machine-learning and human-computer interaction, and the largest research group working on esports in the world (27 researchers, University of York); a leading television facility based at MediaCityUK (Dock10); an immersive content-making studio for AR, VR, and MR (REWIND); and a class-leading data-mining company (Cybula). In addition, the project is employing four PDRAs, one research analyst, one research technician, and will provide concrete research topics for the IGGI2 CDT (2.4.1). Such a project exemplifies the reach of TFTI's research, yet it also owes the power and credibility of its bid to a project that preceded it, DC Labs.

2. Expanded partnerships.

The Digital Creativity Labs (£18M – Oct 2015-Sep 2021) is a co-hosted hub, jointly directed by TFTI and Computer Science, and spread across another three universities (Liverpool, Durham and City, London). The hub was conceived of as a place in which industry and the third sector could engage with academia in order to develop technologies and other research outputs. These combine games, gamification, data visualization, AI and machine-learning with developments in storytelling in digital forms and formats. Existing expertise in human-computer interaction, artificial intelligence and gaming processes was augmented by research-staff appointments, including both one lecturer and one reader in TFTI (2.1) and a host of associates from TFTI. The hub was set up with an impressive seventy partners from national institutions (e.g. BBC R&D, the BFI) to major corporations (e.g. EA Games, Revolution Software) and local organizations (e.g. York Museums Trust). Other partners come from the cultural sphere (e.g. Pilot Theatre), provide specialist production services (e.g. Limina Immersive, a VR company) and promote particular interests (e.g. the British Council for Archaeology). DC Labs employs 7 PDRAs, was a key asset in securing the two IGGI CDTs, and runs summer schools, engaging 8-9 learners annually to work on research projects.

The projects that have arisen from the DC Labs are many and varied. TFTI's involvement has been both central and contributory as the following examples show:

- i. Object-Based Media, another ICS, presents a radical new approach to the production of and interaction with video-based material. Researchers work with BBC R&D, BT R&D and other partners to develop tools which will allow viewers to select material that they want to see and for providers to tailor material to viewers themselves. The centrality of the concept for the BBC can be found [here](#). The team has collaborated with Symbolism Studios to produce a short film that was

- shown at the York Mediale festival in autumn 2018. The development of a software toolkit has the potential to revolutionize the making and experience of watching television and other screen-bearing devices, something reflected in the calibre of and interest from the project's major partners.
- ii. The 'Digital Narratives for Archaeology and Heritage' project features the expertise of TFTI staff, in association with colleagues from Archaeology and Electronic Engineering. The project has already developed VR and MR applications, such as the award-winning Viking VR exhibition, curated by the York Museums Trust in 2017. The output integrated the interpretation of archaeological research into an immersive narrative experience. This concrete realization is designed to open the way to further bespoke deployments. One such example is the major '[Dig for Eboracum](#)' project. Staff from TFTI and Archaeology are already in discussion with the York Archaeological Trust.

These representative examples demonstrate that DC Labs is a pioneering hub, fostering productive collaborative projects between the academy, industry and the third sector. Its funding has provided space and time for a critical mass of researchers to carry out collaborative, interdisciplinary research which benefits the research base, society and the economy.

3. National standing:

- i. TFTI is also a major collaborator in [XR Stories](#), with two professorial CIs working with a professorial PI from Electronic Engineering. This £5.8M project, funded by the AHRC as one of its fifty-five month 'Creative Industries Cluster Partnership' projects (Oct 2018-Apr 2023), develops the aims of DC Labs, but takes them in a new direction. The aspiration of the project is to establish the Yorkshire and Humber screen industries as the UK centre of excellence in immersive and interactive digital storytelling. Together with major partners Screen Yorkshire and the BFI, the team will be working to enhance the region's potential to innovate and the capacity to engage with the next generation of digital storytelling. It will then grow the economic and commercial strength of the cluster and develop its sustainability beyond the life of the project. The notion of 'creative industries cluster' is central to the success of the project. Partners include two live performance companies, seven film and television companies, five games companies, five national trade associations, four regional organizations and five Local Enterprise Partnerships. The goal is nothing less than a transformation of the Yorkshire and Humber creative environment, expanding jobs in the sector and attracting investment. The sustainability of the project foresees continued economic growth and the development of technological progress in the service of immersive and interactive storytelling.
- ii. Closely aligned with XR Stories, [SIGN](#) (£4.7M – Feb 2020-Jan 2023) is providing further support to the regional screen industries (film, television, games and other digital media). Building on TFTI's research and expertise in this field, and developing new methodologies and insights where appropriate, the team is undertaking a rigorous ongoing appraisal of the sector and the challenges it faces, including skills needs, diversity and inclusion, and economic growth strategies. The project will be addressing those challenges through innovative, evidence-based approaches to knowledge exchange, training and business development. The initial methodologies adopted for this work will be tested in a pilot phase, with the data collected here analysed to enable development of the full ongoing programme. SIGN is designed to generate social, cultural and economic benefits to the screen industries, those who work in them, those who use the content and experiences they create, and those who research these processes.

4.3 Contribution to the Research Base

TFTI can now take its place among the research-intensive departments submitted to this Panel, something reflected not only in the four sections of this Environment template, but also in the achievements of its staff. The following credentials indicate the national and international standing of the Department's members. Ten colleagues are or have been involved in journal editorship (e.g. *Media Practice and Education*, *Journal of British Cinema and Television*, and *Open Information Science*); four are or have been members of the Peer Review College of the AHRC and the EPSRC; three have been Coordinators for four Theatre and Performance Association's Working Groups; twenty-three referee articles for major international journals (e.g. *Contemporary Theatre Review*, *Theatre Research International*, *Conference on Human Factors in Computing Systems* (CHI), *Space and Culture*, and *Theoria*); eight evaluate national and international grant applications (e.g. Leverhulme Trust, Wellcome Foundation, Research Grants Council of Hong Kong, Swiss National Science Foundation, and the Austrian Science Fund (FWF)) and thirteen read MSS for major academic publishers (e.g. CUP, OUP, Bloomsbury, Routledge and MIT). Colleagues regularly chair panels at international conferences (43), give keynote and invited papers at conferences (162) and invited talks nationally (67) and internationally (29). Individually, Dr Peschel was awarded a European Holocaust Research Infrastructure Fellowship in Holocaust Studies (2014); Prof. Barnett was shortlisted for the David Bradby TaPRA Award (2016); Dr Hook won the 'Best Community Project or Event' category at the York Culture Awards (2016) for a collaborative project with New Visuality using interactive media to support text-authoring by people with physical and learning disabilities; and with Dr Schofield, won the 'Excellence in Media Arts' category at the same ceremony in 2017 for the Viking VR exhibition; and Dr Lopez's film *Shelf Life* was shortlisted for the AHRC's Research in Film Awards, 'early career' category (2018).