

Institution: University of Manchester

Unit of assessment: 33B (**Music**, Drama, Dance Performing Arts, Film and Screen Studies)

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

1.1. Context and Structure

The Music Department at Manchester has a wide-ranging research profile, comprising four principal strengths: instrumental and vocal composition, electroacoustic composition and interactive media, musicology, and ethnomusicology. Performance and live music-making are integral to all four areas, resulting in a distinctive, dynamic fusion of theoretical and practice-based investigation. During the census period we have addressed issues of sustainability by appointing four new early-career colleagues, allowing the unit to expand from 14 to 15 full-time academic staff, with the newly-established position held by **Gagatsis** as practice-based researcher in jazz studies strengthening the fundamental role of performance within our research. We now have nine staff working primarily in musicology and/or ethnomusicology (**Alaghband-Zadeh, Bithell, Cooper, Fanning, Gagatsis, Garratt, Hawkins, Herissone, Hyland**, plus **Rutherford**, retired January 2020), and six in composition (**Berezan, Climent, Grange, Malone, Reeves, Whalley**).

Our key strategic achievements since REF2014 include:

- Developing an increasingly interdisciplinary and collaborative research profile, with wide-ranging research partnerships and a strategic emphasis on thematically-focused activities in our core research areas
- Maximising the impact of our research through new collaborations with industry, healthcare, cultural and community partners
- Receiving recognition of our researchers and outputs across all our key specialisms through international prizes, awards, commissions and accolades including election of a Fellow to the British Academy
- Increasing our overall external grant capture by 128%, with 77% increase in HESA-registered funding
- Supervising 48 PhD students to completion, increased from 37 in the previous period

The Department's enhanced emphasis on outward-facing research activities is demonstrated by our significant shift towards research involving interdisciplinary academic collaborations – strengthened institutionally by our positioning within the School of Arts, Languages and Cultures (SALC) – and with an increasingly diverse range of industry, healthcare, cultural and community partners. These collaborations have been developed strategically within a more formalised research structure in which our research centre for innovation in sound and interactive art, NOVARS, has been joined by two newly established interdisciplinary research groups. These are complemented by our focus on seven core research areas through which staff working in different sub-disciplinary contexts explore shared themes, stimulating both individual and collaborative research activities.

Our staff sustain high levels of national and international research activity, disseminated via both traditional and contemporary routes. Our impact strategy has focused on expanding the range and reach of our public-facing activities: our research continues to influence non-academic beneficiaries including professional performers, leisure-time music-makers, concert-goers, teachers and pupils, but now also benefits new partners working in health and wellbeing, community music, the computer-game industry and tourism. We have maintained our contribution to the sustainability of the discipline by increasing recruitment to our PhD programmes and by our staff members' extensive contributions to academic service and national-level leadership.

1.2. Research and Impact Strategy

1.2.1. Implementation of 2014 Research and Impact Objectives

In developing the four key objectives outlined in our REF2014 submission we have placed particular emphasis on enhancing our strategic planning and collaborative activity, in response to panel feedback, as follows:

To continue to place a high priority on enabling staff to produce and publish internationally leading research in musicology, composition and performance

This objective has been addressed through a renewed emphasis on quality over quantity, and by targeting dissemination modes that maximise the audience reach of our research. Our musicologists and ethnomusicologists have published monographs, critical editions, edited books and book chapters with leading academic presses, and peer-reviewed articles in highly rated journals. Highlights include: **Bithell's** influential open-access OUP monograph *A Different Voice, A Different Song* (see Impact Case Study 'Singing for Life'); **Garratt's** interdisciplinary CUP monograph, *Music and Politics*; and **Herissone's** book chapter and edition outlining the discovery of a lost piece by Henry Purcell. Our composers have produced outputs commissioned by high-profile organisations, with multiple performances across 28 countries. These include two BBC commissions – **Grange's** violin concerto and **Reeves's** *Light Speed with Time Canons*; **Malone's** Violin Concerto, part of a double commission from Opera North; **Berezan's** Nautical Cycle and its single-composer commercial CD for Empreintes DIGITALes; and **Climent's** *S.laag*, awarded the International Computer Music Association's 2016 European Region Award. The quality of our research is evidenced by many markers of international recognition, including multiple keynote invitations; dedicated single-composer concerts and featured-composer status at major festivals; the appointment of six colleagues to prestigious positions, fellowships or residencies; and the awarding of major international prizes to three colleagues (see Section 4.4).

To place particular emphasis on developing collaborative research activities

Since REF2014 our principal strategic objective has been to enhance our collaborative research relationships within and beyond the University. We have established two interdisciplinary research groups: Music, Health and Wellbeing (**Bithell**) brings together Manchester academics and practitioners working in a range of community, educational and healthcare settings, while States of Flux (led by **Hawkins**, following his earlier co-leadership of the Sonic Cultures Research Group for the interdisciplinary study of music, sound and culture) investigates knowledge of 'the contemporary' in art and culture since 1970. The activities of the NOVARS Research Centre (**Climent, Berezan**) have diversified, with innovative research on live interactive applications for composition leading to new partnerships in academia and with the technology, tourism and cultural industries (see Impact Case Study 'Sonic Adventures'). We have also continued to develop collaborative projects in performance studies featuring the Danel String Quartet, **Fanning** and **Cooper** and interactive creative work involving our composition staff and associated contemporary ensembles (see Section 4.2).

We have further developed our departmental research structures by focusing on seven core research areas that allow Music staff to explore shared research interests from the contrasting perspectives of their different subdisciplines. These are: Creative and Performing Practices; Sound, Space and Interactive Art; Politics, Protest and Power; Nationalism, Mobility and Identity; Historically and Culturally Informed Analysis; Critical Reception Studies; and Intercultural Musicking. The core research areas shape the programme for our weekly Thursday research afternoons, with themed sessions involving distinguished invited specialist speakers and round-table discussions incorporating staff and postgraduates, paving the way for intra- and cross-institutional collaborations with both intellectual and creative research outcomes. The research afternoons also feature more traditional research presentations, alongside performance and composition workshops delivered by our resident

ensembles and visiting artists.

To ensure sustainability in staffing through the appointment of junior [ECR] staff

We have met this objective by appointing four early-career colleagues, enabling us both to sustain existing areas of specialism (appointing **Hyland** as Lecturer in Music Analysis), and to develop our strategic focus on contemporary musicology and interdisciplinary collaborations: **Hawkins** works on new complexity and the social impact of technology on listening practices, **Alaghband-Zadeh** researches the music and contemporary listening practices of North India and the South-Asian diaspora, and **Gagatsis** investigates jazz improvisation from the perspective of embodied knowledge and spatial navigation. All four appointments have enriched our core research areas and collaborative activities (see Section 2.1).

To develop existing strengths in academic outreach, placing a growing emphasis on knowledge transfer and impact

Since REF2014 we have extended and diversified our impact activities significantly, with a strategic focus on five areas of activity (detailed in Section 4.2). Three expand areas established in the previous assessment period:

1. We have continued to host public events emerging from **Fanning's** Weinberg project and **Cooper's** Beethoven research (both Impact Case Studies in REF2014), and from our MANTIS (Manchester Theatre in Sound) festivals. In addition, we have diversified the pathways through which our research is made available to the public via **Bithell's** community-singing research, and **Garratt's** research project 'Organ Music from the Great War', disseminated via online communities.
2. Our musicologists' critical editions have continued to influence music educators and their pupils, and we have initiated new composer-led projects using music to engage school pupils in other aspects of their learning, working with colleagues in Engineering (**Reeves**) and Business Management (**Climent**).
3. We have continued our consultancy work for professional performers, including in **Fanning's** and **Cooper's** advisory roles for Weinberg and Beethoven performances and **Herissone's** on her reconstruction of Purcell's *Come ye Sons of Art* and rediscovery of a lost piece by Purcell.

Two newly developed areas form the basis of our Impact Case Studies:

4. **Climent's** research has led to new engagement with the technology sector to develop software applications arising from his creative work using geolocative technology; this has resulted in two spin-off companies and has had impact on creative artists and the culture and tourism industries.
5. **Bithell's** work has engaged with community musicians and choral educators, enriching their professional practice and providing a theoretical framework to support musical interventions in community and healthcare settings.

1.2.2. Future Research and Impact Strategy

Our strategic objectives beyond 2021 build upon our focus on collaborative and interdisciplinary research and seek to enrich further the societal impact of our work. We will concentrate on three main strands:

To increase our involvement in large-scale externally funded research projects, developing our cutting-edge interdisciplinary and collaborative research activity

We will strengthen our support for the production of outstanding research outputs, using our successfully-established infrastructure of research groups and core research areas alongside existing mechanisms offering individual research advice and mentoring, to deliver collaborative projects that increase the reach, range and impact of our research. We will build on our success in attracting external research funding for projects involving practice-based research in composition by continuing to work strategically with partners on

interdisciplinary project bids. The efficacy of this policy is exemplified by the recent research on public protest and climate justice by members of our Politics, Protest and Power core research area, leading to **Malone's** role as Co-I on the 24-month practice-based project 'Community Climate Resilience through Folk Pageantry', awarded £329,915 by the AHRC in July 2020. Projects are also being developed through strategic targeting of seed-corn funding for pilot studies (see Section 3.2): within the Creative and Performing Practices group, **Berezan** completed an internally funded pilot in 2020 for Sound Runner – a practice-based collaboration with sports psychologists exploring how responses to sound may be harnessed to improve physical performance in sport; within the Historically and Culturally Informed Analysis group **Hyland** has undertaken preliminary archival work for a project on the Viennese string quartet with external funding from the British Academy/Leverhulme small-grants scheme, and has also secured internal funding for 2020–21 to pilot her international collaboration with Steven Vande Moortele of Toronto University, 'Towards a Micro-Theory of Romantic Form in Viennese Music, 1815–28'; within the Intercultural Musicking group, **Alaghband-Zadeh** applied in November 2020 for external seed-corn funding for her planned ECR project exploring musical identity in performance within Manchester's South-Asian communities; and within the Critical Reception Studies group, **Herissone** is preparing a large project bid to trace the construction of meaning in the posthumous reception of Henry Purcell and his music within a nationalist narrative.

To focus pro-actively on research that has a positive impact on a broad range of non-academic beneficiaries

We will optimise the public value of our research by building on the successful expansion of our impact activities in this REF cycle, particularly the fruitful relationships we have developed with practitioners working in community and healthcare settings via **Bithell's** research and Music, Health and Wellbeing group and our partnerships with the cultural and technology industries developed through **Climent's** and **Berezan's** interactive composition research. We will cultivate new links with local communities through **Malone's** involvement in the AHRC-funded climate-resilience project and **Alaghband-Zadeh's** South-Asian diasporas project. These initiatives will help shape a more formal strategic plan for successful long-term relationships with an expanding cohort of partners, with particular emphasis on Greater Manchester as an exemplary site of cultural production that can inform new research paradigms.

To demonstrate strong commitment to an open research environment, and to adopting transformative equality and diversity policies for staff and students

Building on our commitment to the University's Open Access strategies (articulated in REF5a Section 2.7), and our contributions to the development of national OA strategies (see Section 4.3), we will work to increase the accessibility of our research to both academic and non-academic beneficiaries. This will be achieved through applications to external funding schemes incorporating gold-access funding for publications, alongside the University's dedicated open-access funds. We will continue to use internet-based streaming channels to mount free-to-access recordings of our creative work and other resources wherever copyright restrictions permit. We will also ensure that the progress we have made towards greater equality of representation in our staff profile and research activities during this census period continues (see Section 2.3), so that our work reflects more fully the great variety of interactions between music and society in the contemporary world. We will continue to work with colleagues in SALC to implement the University's Equality and Diversity Action Plan (see REF5a Section 3.2) and the strategies outlined here in Section 2.3 in order to encourage enhanced access to the field.

Section 2. People

2.1. Staffing Strategy and Staff Development

2.1.1. Recruitment Strategy

During the census period the Music Department expanded from 14 to 15 permanent lecturers, all on full-time teaching-and-research contracts. We have maintained strong continuity within our staff base, with just two colleagues moving to other institutions (Laura Tunbridge to Oxford in 2014 and Thomas Schmidt to Huddersfield in 2017) and one retiring within this period (**Rutherford**, 2020). Our success in both retention and promotion has resulted in a shift towards a greater proportion of senior staff: between 2014 and 2020 six colleagues were promoted from Senior Lecturer to Professor (**Climent**, **Herissone**, **Reeves**, **Bithell**, **Rutherford** and **Garratt**), while **Malone** was promoted to Reader and **Whalley** to Senior Lecturer.

Accordingly, our recruitment strategy has been to address issues of sustainability by prioritising early-career appointments, as well as expanding expertise within our core research areas, strengthening synergies between our specialist areas, and extending our collaborative and interdisciplinary research potential. The University's investment in the Department has enabled us to make four permanent appointments, including one newly-established post. **Hyland**'s specialism in historicist approaches to nineteenth-century musical analysis adds a new strand to our core research areas in Historically and Culturally Informed Analysis and Critical Reception Studies. **Alagband-Zadeh** has brought new opportunities for partnerships with Manchester's South-Asian diasporic communities, adding a new strand to our Intercultural Musicking group and to Nationalism, Mobility and Identity. **Hawkins** has helped develop our research in Creative and Performing Practices and Critical Reception Studies by creating an interdisciplinary network for contemporary art and culture and by facilitating dialogue on contemporary creativity between our composers and musicologists. **Gagatsis**'s specialisms in jazz, improvisation and performer psychology bring fresh perspectives to our Creative and Performing Practices research and are fundamental to forthcoming collaborative projects with staff in the Faculty of Biology, Medicine and Health.

Our externally funded postdoctoral researchers have made valuable contributions to our core research areas since REF2014. **Chornik**'s three-year Leverhulme project 'Sounds of Memory: Music and Political Activity in Pinochet's Chile' (2013–16) culminated in the publication of her extensive digital archive of music connected to centres for political detention and torture in Pinochet's Chile (<https://www.cantoscautivos.org/en/>), and was aligned with concerns fundamental to our Politics, Protest and Power group. **Patsiaoura**'s project 'Musicking in the Spirit: Worship, Community and the Making of Locality among Nigerian Pentecostals in the Diaspora', the focus of an eight-month internship funded by the São Paulo Research Foundation in 2019, reinforced connections between our Intercultural Musicking group and Campinas' Local Musicking research group. We expect the 2020 appointment of **Chan** to a three-year Leverhulme ECR fellowship for 'False Relations: Music and the Rhetoric of Dissonance in Early Modern Europe', to bring valuable interdisciplinary perspectives to the Historically and Culturally Informed Analysis group.

2.1.2. Staff Development Strategy

All staff complete a Personal Research Expectations Plan (PREP) annually, meeting with the Departmental Research Co-ordinator to reflect on their research plans and identify priorities and support needs. The Co-ordinator provides advice on research outcomes, external grant applications, cultivating research networks, and impact activity, and mutually agreed targets are set. The University's annual Research Review Exercise (RRE) involves rigorous peer review of colleagues' published outputs. All colleagues on probationary contracts receive individual peer mentoring to facilitate strategic planning of their research and provide guidance on outputs and grant applications. This support is extended to all early-career researchers, as well as other colleagues identified through PREP as likely beneficiaries. Membership of our core research areas also enables early-career staff to benefit from the

guidance and experience of senior colleagues.

Newly-appointed lecturers normally complete a four-year probationary period, during which they have reduced teaching and administrative loads and receive formal training via the Humanities New Academics Programme (HNAP), including five full units addressing research-career development. Probationers receive mentoring from an appointed senior colleague within the Department in addition to the guidance provided by the Research Co-ordinator and SALC's research-training structures for ECRs.

All staff members contracted to undertake research have an annual research allowance of £1,000, increased from £600 p.a. available for REF2014. SALC's research-grant writing support officers advise on external grant schemes and applications; bespoke support for developing knowledge exchange and impact activities is also given by the School's Associate Director for Research Impact and Knowledge Exchange and Impact Officer alongside the University's Business Engagement team (see Section 3.2). The Faculty of Humanities Researcher Development Framework offers an annual programme of researcher-led training designed to share experience and best practice. All staff undertake compulsory research-integrity training and projects involving human subjects undergo ethical review to ensure they are designed and managed appropriately. Staff involved in recruitment and management also complete unconscious bias and equality-and-diversity training.

Staff in SALC may apply for one semester's Institutional Research Leave (IRL) after six semesters of regular service; the timing of IRL may be adjusted by one semester according to planning needs. In addition, Supplementary Research Leave (SRL), and Professorial Enhanced Research Leave (PERL) have been available during the current cycle to enable the completion of high-quality research outputs. During the period 2014–20 **Herissone** and **Hyland** were awarded SRL and **Grange** PERL.

2.2. Research Students

2.2.1. Recruitment and Completion

At a challenging time for the recruitment of doctoral research students, Music has succeeded in increasing its postgraduate research community, supervising 48 PhD students (42.9 FTE) through to completion in the period 2014–20, as against 37 in REF2014. We have enjoyed high success rates in external funding competitions, with 13 students funded through the AHRC or ESPRC North West Consortium Doctoral Training Partnership. A further 7 are funded by University studentships, and 13 are supported by Music's own doctoral bursaries, funded through endowments. Thus 70% of our PGRs are funded students. Between the admission of the 2011 cohort and the 2013 cohort full-time completion rates in the Faculty improved from 70% to 77.6%, while the average completion rate for Music was 78%. The success of our recruitment policy is demonstrated by the 13 former doctoral students who have been appointed to academic posts during the census period, 8 in the UK and 5 internationally. Our recruitment is overseen by the Faculty's PGR Strategy Group and Postgraduate Research Committee, which address equality-and-diversity challenges, and monitor progress and completion rates.

2.2.2. Progress Monitoring and Support Mechanisms

Our PGR admissions processes ensure that doctoral project outlines are developed in consultation with prospective supervisors before a formal application is submitted. Admitted students receive fortnightly supervisions with their main supervisor. Their progress is supported by the University's continuous monitoring programme, eProg and by formal progression panels, which take place biannually with their full supervisory team (main supervisor and 2 other academics providing complementary expertise) assessing submitted work and research plans, providing feedback to the student, and making formal recommendations for progression. Panels are frequently interdisciplinary, and during the census period staff in Music have contributed to panels for 12 PhD students registered in 10

other Departments: Drama, Creative Writing, Cultural Practices, French, German, Russian, History, Philosophy, Social Anthropology and Theology.

2.2.3. Skills Development and Careers Training

All new doctoral students complete a skills audit to identify key training needs. SALC's Associate Director for Research: PGR is responsible for delivering this training through two main channels: Artsmethods@manchester, which focuses on theoretical and technical training, and the Graduate School, which emphasises professional skills and careers development. Doctoral students may also audit Masters' modules for training in specific skills. This is supplemented by the Faculty of Humanities Researcher Development programme. Subject-specific training is provided by the AHRC and Northwest Consortium Doctoral Training Partnership and by national bodies including the Royal Musical Association (RMA) and the Institute of Music Research (IMR); **Bithell**'s role as co-convenor of the IMR study day 'The Ethics and Aesthetics of Studying Music in Situations of Conflict and Violence' (2018) is one example of the Department's contribution to national-level graduate research training. We also support students in gaining places on research-focused summer schools, such as the International Doctoral Workshop in Ethnomusicology (University of Hildesheim), or in taking up placements as part of their AHRC-funded programme. Our Thursday research afternoons provide a weekly focus for all postgraduate students, offering training in research methodologies and presentation skills. Students may apply to the School for up to £400 per year to support research training and conference attendance, and up to £3,000 towards fieldwork expenses; they also receive an allowance for printing and library costs.

The extensive services and resources of the University's Careers Service are complemented by the Department's own music-specific careers events. Professional development is integral to our PhD in Composition, with students working closely with the BBC Philharmonic Orchestra and other professional ensembles and benefiting from the exceptionally rich musical life of the city and its many cultural institutions.

2.3. Equality and Diversity

The University is strongly committed to ensuring equality of opportunity for all staff and students (see REF5a Section 3.2). The Faculty of Humanities Equality and Diversity Working Group is responsible for implementing Equality and Diversity Action Plans, and for monitoring staff gender and ethnicity profiles in recruitment and promotion. SALC offers targeted support to under-represented groups for training for leadership roles and for promotion applications. Within Music, further support for career development and promotion applications is embedded within the voluntary Performance and Development Review (PDR) process. The Department's commitment to EDI issues is demonstrated by our contributions to national disciplinary initiatives (see Section 4.3).

Our new appointments and promotions have allowed us to make progress towards improving the diversity and gender representation of our staffing profile. The appointments of **Hyland** and **Alghband-Zadeh** increased the proportion of women among our staff from 28.6% to 33.3% and the personal chairs awarded to **Herissone**, **Bithell** and **Rutherford** introduced the Department's first female professors. At the census date our staffing profile comprised 9 professors (7 male, 2 female, plus **Rutherford** before her retirement), 1 reader (male), 1 senior lecturer (male) and 4 lecturers (2 female, 2 male). We maintain a strong international profile, with colleagues from Canada, the USA, Spain, Greece and Ireland alongside UK nationals. While BAME representation remains an area requiring further progress, our new appointments have resulted in the proportion of Departmental staff from BAME backgrounds rising to 6.7% during the census period.

The Department facilitates equality of opportunity in research for all its staff and research students through broader procedures, including support for staff on fixed-term teaching-only

contracts offered via mentoring and a Departmental Research Development Fund. Those with caring responsibilities are assisted by SALC's fund for Carer Support for Research-Related Professional Development, which covers a proportion of care costs to enable staff members to attend conferences. The University's strategies for managing leave periods necessitated by ill-health, parental responsibilities or career breaks involve targeted Departmental and professional support upon return to work; staff returning from parental leave may also apply for an additional semester of research leave through the Academic Returners Leave Scheme. Flexible Working procedures allow staff to request changes to their employment conditions due to caring commitments or ill-health (alongside requests for reasonable adjustment). During the census period 4 staff members in Music been permitted such adjustments.

The Department places a high premium on the wellbeing of all its staff and students. All members of the University may access an extensive programme of activities for wellbeing, complementing the professional support services offered by the Counselling Service. Further sources of support include the LGBT Staff Network and LGBTQ+ Student Society. Doctoral students may also access a range of bespoke resources through the Graduate School Well-being Hub and the PGR Well Bee-ing Project. The Department makes a significant contribution to this University-wide provision for wellbeing through its free lunchtime concerts, Music on Campus outreach initiative and Singing for Wellbeing workplace choir.

Section 3. Income, infrastructure and facilities

3.1. Research Funding

During the census period Music secured £841,447 in grants from external funders. This includes £590,148 in income from major HESA-registered funders, increasing by 77% the £333,394 received from them during the 2014 census period. Our strategies for increasing Music's involvement in collaborative and interdisciplinary research projects (see Section 1.2) have enabled us to construct new avenues for grant capture by becoming partners in large-scale projects funded by UK research councils and the European commission. This has been particularly beneficial to our practice-based research in composition, for which external research funding is traditionally difficult to obtain. We have had three significant successes. **Grange's** contribution as co-investigator in the three-year £3.9m AHRC Open World Research Initiative award, 'Cross-Language Dynamics: Reshaping Community' (2017–20) had as its major research outcome the opera *Daedalus*, originally due to be premiered by Constella Opera at the Tête-à-tête Festival in August 2020, but now to be produced for August 2021 due to Covid-19 delays. Of the £956,275 distributed to the University of Manchester, £94,763 was apportioned to Prof. Grange's part of the project. Second, **Climent** and **Berezan** were co-investigators in the European Union award for the European Art-Science-Technology Network for Digital Creativity (EASTN-DC) (2017–20), with £82,204 allocated to Manchester; research outcomes included compositions and impact-related activities aimed at educators, business and the cultural industries. Finally, the award in July 2020 of £329,915 for the two-year project 'Community Climate Resilience through Folk Pageantry' via the AHRC's UK Climate Resilience Programme includes £123,462 for **Malone's** practice-based contribution to the project, which will culminate in a community performance in 2022. The census period also saw the conclusion of **Schmidt's** AHRC project 'Production and Reading of Music Sources'; of the £220,802 allocated to Manchester as co-host, £53,348 was apportioned during 2014.

Alongside our involvement in large-scale collaborative projects, Music has continued to target external funding schemes that enable the completion of individual research projects. A substantial proportion of this funding has come from the Arts Council and other non-research-council funders, which is therefore not reported in Higher Education Statistics Agency returns. This research activity falls into three main categories:

1. **Leverhulme Trust Fellowships: Rutherford** was awarded a Leverhulme Major Research Fellowship (2016–19, £150,601) for her project 'A History of Voices: Singing in Britain 1690 to the Present Day'. The Department also hosted **Chornik's** Leverhulme Early Career Fellowship (2013–16, £69,000) and welcomes **Chan** from September 2020, awarded £71,784 within the same scheme.
2. **Small Research Grants (British Academy, Leverhulme and charitable foundations):** British Academy/Leverhulme awards were made to **Bithell** to fund fieldwork for 'Safeguarding and Transmission of Musical Heritage in Contemporary Georgia (Caucasus)' in 2015–16 (£9,922), to **Hyland** for 'Reconstructing the Viennese String Quartet, 1818–1830' in 2016–17 (£6,834), and to **Fanning** to support the Weinberg conference hosted by the Department in January 2019 (£3,800). Fanning also received £23,000 from the Adam Mickiewicz Institute for this project, plus grants of £12,000 and £40,000 from the Nielsen Trust in 2017 to support his translations of letters and essays by Carl Nielsen. An award of £2,000 made to **Hawkins** by the Paul Sacher Foundation enabled him to undertake archive research on the Brian Ferneyhough Collection.
3. **Funding from the Arts Council and charitable trusts to support practice-based research in composition: Malone's** opera project *Mysterious 44* was supported in 2015–16 by grants from Arts Council England (£14,735), the Richard Dawkins Foundation for Reason in Science (£5,400) and the Ida Carroll Trust (£1,000); his creative project with Opera-North, 'A Day in the Life', was supported by Arts Council England (£14,700), the Ida Carroll Trust (£1,000), the RVW Trust (£500), and Manchester's Faculty of Humanities Strategic Investment Fund (£2,500); he was also co-investigator for 'The Travelling Heritage Bureau' project (2017–19), funded by a Heritage Lottery Fund award of £48,000. **Grange** was awarded £1,000 by the RVW Trust plus £10,000 from the University's Investing in Success scheme in 2018 to support the Gemini Ensemble's CD recording of his works for Metier, *Homage*. Works commissioned from **Reeves** by pianist Tom Hicks and the Solem Quartet, and by the Royal Albert Memorial Museum, Exeter and Devon Philharmonic Orchestra, were supported by awards from the Ida Carroll Trust (£1,000 in 2019; £750 in 2020) and Arts Council England (£1026; 2020); a recording of his piano music by Hicks was also facilitated by the Ida Carroll Trust (£500; 2020).

Music's strategies for enhancing grant capture centre on its structural facilitation of research collaborations via its research groups and core research areas, individual mentoring provided by the Research Co-ordinator, the annual PREP process, and the assistance offered by the School's research-grant writing support team. To support our development of new large-scale research projects, we place particular strategic emphasis on targeting internal and external seed-corn funding schemes for pilot studies, with support for developing subsequent external bids provided via mentoring and peer review. **Hyland's** British Academy/Leverhulme Small Research Grant, for example, provided the archival basis for a large project-grant bid currently in progress, while in July 2020 she was awarded a further £4,650 from the University of Manchester–University of Toronto Research Fund as pump priming for the international collaborative project outlined in Section 1.2.2 above. Similarly, **Berezan's** award of £1,468 from the School's Research Development and Support Fund enabled the pilot study for his planned large-scale practice-based sports psychology project Sound Runner (documented at <https://vimeo.com/376886239>).

3.2. Infrastructure Supporting Research and Impact

Since REF2014 the University has significantly increased its strategic and operational support for research. In SALC this is overseen by the Director of Research and the Research Support Office, who offer advice on the strategic planning of research via annual review meetings, and operational support in the management of externally funded projects. The research support team includes grant-writing support officers, an Associate Director of Research: Impact, and a Knowledge Exchange and Impact Officer. At Department level,

strategic and personal research planning is led by the Research Co-ordinator, alongside a team of senior colleagues who act as research mentors and peer reviewers (see Section 2.1.2). Postgraduate research students are supported by SALC's Associate Director of Research: PGR and the Departmental Postgraduate Research Co-ordinator, who together provide strategic leadership in all areas of postgraduate research, including arts-specific research training, local-level administration and pastoral care.

Financial support for research and impact activities is provided at University, Faculty and School levels. During the assessment period, in addition to the £12,500 internal funding awarded to **Malone** and **Grange** and the pump-priming awards totalling £6,118 made to **Hyland** and **Berezan** (see Section 3.1), Music has been awarded funding from the Humanities Strategic Investment Fund and SALC's Impact Support Fund to develop our outreach activities and evaluate their impact (**Bithell's** and **Climent's** Impact Case Studies), while the School Strategic Fund supported the establishment of our Music, Health and Wellbeing research group (**Bithell**).

Knowledge-exchange and impact activities are addressed structurally within the University's Directorate of Research and Business Engagement, and the Office for Social Responsibility. The University's Business Engagement Support Team has facilitated the development of links to the technology and cultural industries relating to **Climent's** research on interactive game audio. The Cultural Events team at the Martin Harris Centre for Music and Drama has supported our public-engagement work relating to performance studies, including our Weinberg and Beethoven projects (**Fanning** and **Cooper**).

Music's practice-based research activities are supported by an estates' infrastructure focused on the specialist rehearsal, practice and performance facilities of the Martin Harris Centre. These include the 350-seat Cosmo Rodewald Concert Hall, our professional performance and recording venue used by composition staff and students and for the 100+ public concerts we mount each year, which are key to our impact and engagement work. Our composition and performance researchers work closely with our resident string quartet, the Quatuor Danel, and with leading contemporary ensembles, including Psappha, Ensemble 10/10, the Vonnegut Collective, Distractfold and Trio Atem. Our award-winning Electroacoustic Music building includes three large research studios, a fourth multi-function studio, and a large studio cluster; equipment includes 32, 5.1 and 8-channel monitoring for sound-diffusion performance research and multi-channel composition, a Hordijk modular synthesizer system, Focusrite audio-over-IP devices, microphones and specialist software, which, together with our electronic diffusion system, Manchester Theatre in Sound (MANTIS), are fundamental to the research of **Climent** and **Berezan** and our electroacoustic composition postgraduates. The School provides an annual budget for equipment renewal, upgrading and maintenance, with technical support from a permanent, full-time technician.

The scholarly infrastructure supporting our musicology and ethnomusicology research centres on Manchester's research libraries: the University of Manchester Library, Lenagan Library (our specialist library for Music and Drama) and John Rylands Library (housing the University's special collections); the Henry Watson Library in Manchester Central Library; and Chetham's Library. The University of Manchester Library is notable for its thousands of historical and seminal recordings, its audio-visual collections, and its digital resources – the largest academic digital collection in Britain. It also offers tailored research support on data management, disseminating research and identifying impact. The city's libraries house rare primary sources of music, including many music manuscripts and early printed scores held at the John Rylands Library, the internationally important collection of music manuscripts and prints at the Henry Watson Library, and the major collection of early-modern broadsides and song publications in Chetham's Library. Highlights of our work with these sources include **Berezan's** *Sea Lantern* sound installation at the John Rylands Library as part of the Manchester Science Festival in October 2017; composer Joshua Brown's 2019–20

postdoctoral Artist-in-Residence project, using archival material mapping Alan Turing's research into computing patterns, funded by an award of £4,500 by the John Rylands Research Institute; and **Herissone's** 2019 discovery of a set of handwritten annotations in the Henry Watson library's copy of Henry Purcell's 1691 opera *The Prophetess*.

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

4.1. Research Collaborations, Networks and Partnerships

The strategies we have put in place to achieve our objective of increasing our research collaborations have resulted in Music's staff making substantial contributions both to major interdisciplinary research projects with wide international reach and significance and to the activities of our creative partners. These collaborations fall into four categories:

1. The creative research of NOVARS (**Climent, Berezan**) centres on collaborations with interdisciplinary partners including specialists in technology, software and game development, and business management. Highlights include our participation in the EASTN-DC European Network, particularly the showcase for entrepreneurs and SMEs we hosted in 2018, and Climent's establishment of the worldwide LocativeAudio network outlined in his Impact Case Study. Berezan's collaboration with sports psychologist Costas Karageorghis (Brunel University) for the Sound Runner project has further extended the interdisciplinary reach of NOVARS's research.
2. A notable strategic success during the census period has been our acoustic composers' practice-based contributions to interdisciplinary projects (see Section 3.1), particularly **Grange's** participation in the AHRC project 'Cross-Language Dynamics: Reshaping Community', where his case-study on the interlingual in contemporary opera has helped to reconceptualise the relationships between language and community. **Malone** has a strong track record of creative involvement in socio-cultural projects, including the 2018–19 Opera North project commemorating Yorkshire mill workers, 'A Day in the Life', the 2019 Heritage-Lottery-funded project to empower displaced female artists, 'The Travelling Heritage Bureau', and the 2020–22 AHRC-funded Community Climate Resilience project. Our ethnomusicologists also contribute to socio-cultural collaborations, as in **Alaghband-Zadeh's** involvement in the Loughborough University Leverhulme project 'Migrant Memory and the Postcolonial Imagination'.
3. The interests encompassed by our research groups have fostered further partnerships. **Bithell's** research in Music, Health and Wellbeing, for example, has underpinned her supervision of a project on music therapy for people with early-onset dementia led by a University-funded Simon Industrial Fellow in collaboration with Manchester Camerata and the University's Creative Manchester initiative, while **Hawkins's** invited participation in a Leverhulme International Network, 'Evaluating Methods of Aesthetic Enquiry across Disciplines' (2015–18), informed the development of the States of Flux group.
4. We have contributed our expertise to other externally-hosted international research networks. **Herissone**, for example, was invited in 2017 by Thomas LeConte (Versailles Centre de Musique Baroque) to co-convene a three-day symposium comparing early modern French and English court-chapel practices, while **Rutherford** was a key contributor to several opera and voice projects, including the ERC-funded 'Music in London, 1800–1851' project (2013–18), 'Losing her Voice', funded by the 'Being Human' festival (University of Nottingham, 2018), and the Leverhulme International Network 'Reimagining italianità: Opera and Musical Culture in Transnational Perspective' (2016–19).

4.2. Development of Research Impact and Wider Contributions to Society

The impact strategy we have developed since REF2014, summarised in Section 1.2.1, has produced an extensive portfolio of activities in five key areas:

Enriching the cultural experiences of members of the public engaging with music as a leisure activity

Our impact case studies for REF2014, 'The Music of Weinberg' (**Fanning**) and 'A New Side

to Beethoven' (**Cooper**), focused on how we deploy our expertise to enhance the experiences of members of the public attending or participating in musical activities. Fanning and Cooper have continued their extensive engagement with public audiences during the current cycle, contributing numerous public lectures, pre-concert talks and study days, including in the US, South America and Europe; Fanning, for example, gave public interviews and broadcasts to accompany the Quatuor Danel's international tour of Weinberg's complete string quartets in 2019. Both also enrich public experience of professional performances by providing CD liner notes for prestigious labels including Deutsche Grammophon, Chandos and Hyperion, and programme notes for major UK and European festivals, orchestras and venues, including the BBC Proms, for which Cooper has written annually from 2014–19. Fanning also reviews regularly for the *Daily Telegraph*, *Gramophone* magazine and BBC Radio 3, while Cooper contributed to several radio and television features on Beethoven, including for the French channel *Toute l'histoire*, and the BBC Four series *Being Beethoven* in 2020.

Our other musicologists have also given countless pre-concert talks and contributed to public study days, symposia and festivals in the UK, France, Russia, Poland, Chile and Brazil (**Bithell, Herissone, Hyland, Rutherford**). **Rutherford** has been particularly active in writing programme notes, including for six of the UK's leading opera companies, and in contributing to BBC media broadcasts on opera and singing on Radios 3 and 4 (2014, 2017, 2019), and BBC2 (2015, 2019). Our composers have regularly given public masterclasses and been tutors for creative workshops and summer schools across the world from Mexico and the USA to Korea, France and Ireland (**Grange, Reeves, Whalley**), as well as judging public composition competitions (**Whalley**, 2019 Ivor Composers' Awards) and participating in immersive events, such as the 2018 project at Pendle Heritage Centre, Lancashire, inspired by the Pendle Witch Trials of 1612, for which **Reeves** was commissioned to write his three motets, *Spells, Remedies and Potions*.

Since REF2014 we have diversified our contributions to public experiences of music-making through two new projects: **Bithell's** Impact Case Study 'Singing for Life' outlines how her research on the natural-voice movement has had an international impact on professional practice and public participation in community singing, particularly through her work with the Natural Voice Network. **Garratt's** innovative multi-media research project 'Organ Music from the Great War' (2014–18) brings together live performances and video recordings of largely unknown organ music, disseminated through a dedicated webpage and public YouTube channel (https://www.youtube.com/channel/UCUx_XDvvLRvOn9iIMSbm6HA) that has attracted over 50,000 views and has led to Garratt acting as advisor for numerous individuals and organisations internationally, including St Paul's Cathedral and the Kloosterkerk in the Hague.

Enhancing learning through engaging with music educators and their pupils

Cooper's Impact Case Study for REF2014 outlined the substantial impact of his new performance edition of Beethoven's 35 piano sonatas for the ABRSM. The edition has continued to be influential worldwide, especially in China, Europe and the Americas, featuring in all ABRSM syllabuses during the census period [text removed for publication]. The Department's considerable expansion of its educational outreach work is exemplified by our composers' involvement in projects using music to engage young people in science and technology. The Manchester Robot Orchestra project (2016–17), run by the University's School of Engineering with funding from the ESPRC, Siemens and the Granada Foundation, was a particular highlight: for this **Reeves** wrote a new Concerto for Flute and Robots, which became the foundation for creative projects with c.180 pupils in seven Greater Manchester schools, culminating in public performances of the children's own concerti for instruments and robots.

Sharing expertise as consultants to music professionals and the cultural industries

Our staff are regularly engaged as expert consultants for professional performance and recording projects. **Fanning**, for example, has advised on programming Weinberg for the CBSO, RLPO, Hallé Orchestras and Gidon Kremer (Wiener Festwochen), and was consultant for the premieres of two Weinberg song cycles resulting from his research. **Cooper** was engaged as repertoire consultant for Deutsche Grammophon's New Complete Beethoven Edition and Beethoven Rarities recordings and has acted as consultant on Beethoven manuscripts for Christie's auctioneers. **Herissone** is an advisor on Purcell performance projects for (among others) Paul McCreech (Gabrieli Consort) and The English Concert, including the first professional performance of her edition of a rediscovered piece by Purcell in October 2020.

Widening horizons through engaging with the technology industry

The success of **Climent's** LocativeAudio project has led to new relationships with the culture and tourism industries and with software experts in developing commercial applications of the sonic-walk experience, as detailed in the 'Sonic Adventures' Impact Case Study.

Engaging with practitioners in community-music and healthcare settings

Fuelled by our commitment to music as a force for empowerment, transformation and healing, we have developed significant new strands of socially-responsible activity in our work with community-music practitioners, healthcare providers, and related community groups that are helping to influence policy and shape practice. The connections established through **Bithell's** Music, Health and Wellbeing research group complement the professional development activities outlined in her Impact Case Study, most recently demonstrated in her co-organisation of a half-day online workshop at the ESRC Festival of Social Science (November 2020). Additionally, **Rutherford** contributed to the Manchester interdisciplinary project, 'Voices in the Waiting Room' (2014), investigating use of the voice in healthcare environments, while **Malone's** creative work on memory and memorialisation led to invited contributions to a 2014 Wellcome Trust project researching memory loss, an All-Party Parliamentary Group conference on Arts, Health and Wellbeing, and the International Medical Film Festival (MedFest).

4.3. Contribution to Sustainability of Discipline, its Priorities and Initiatives

As elected council members of the Royal Musical Association (RMA), **Herissone** (from 2019) and **Reeves** (from 2020) have led our extensive contributions to debates on the future of the discipline. **Reeves** was a key contributor to three RMA symposia on the assessment of practice-based research, while his position paper (*Tempo*, 2016) has been cited by HEFCE as influential to their subsequent policy development. **Herissone**, as Chair of the RMA's Publications Committee, contributed to consultation on Open Access policies and chaired a panel on the future of academic music publishing at the RMA's 55th Annual Conference, which she co-convened for the Department with the RNCM in 2019. **Hyland** is active in national campaigns on music analysis and equality and diversity, contributing to the Society for Music Analysis video podcasts for teachers and students (<http://www.sma.ac.uk/videos/episode-3/>), establishing the society's mentoring scheme for women, and sitting on the steering committee of the UK's Equality, Diversity and Inclusion in Music Studies network, established in 2019.

4.4. Wider Influence on, Contributions to and Recognition by Research Base

Three staff were awarded major honours and prizes during the assessment period: **Herissone** was elected a Fellow of the British Academy in 2019 and was awarded the Biennial Diana McVeagh Prize by the North American British Music Studies Association in 2015 for her book *Musical Creativity in Restoration England*. **Berezan's** *Lightvessels* received First Prize in the 2015 Klang! International Electroacoustic Music Competition (France), and **Climent's** *S.laag* was awarded the International Computer Music Association

Music Prize in 2016 (European category). Several other compositions have been shortlisted for awards, including **Berezan's** *Starboard* (2015 Musica Nova International Electroacoustic Music Competition), **Whalley's** *Misplaced Time Refound* (2016, BASCA British Composers Award) and **Malone's** *The People Protesting* (2019, two Opus Klassik Awards).

The range of national and international invitations extended to our staff during the census period provides further evidence of the recognition of our research. **Cooper**, for example, was awarded an honorary doctorate from the University of Tucumán and was Visiting Professor at the National University of Paraguay in 2017; **Berezan** held two resident-composer posts in Sweden (2014, 2018) and had 9 invited solo concerts dedicated to his work, 5 in the UK, 3 in Europe and 1 in North America. **Grange** held residencies in Italy (2015) and Aldeburgh, UK (2018) and was featured composer at 8 international festivals (3 in South America, 3 in North America, 1 in Asia and 1 in Eastern Europe). Musicology and ethnomusicology staff have given a total of 69 invited papers and keynote lectures during the census period or since appointment to Manchester, 42 at national and 27 at international institutions, of which 18 were in Europe, 1 in Asia, 2 in North America, and 6 in South America. Composition staff have given 25 invited papers, 12 at national and 13 at international institutions (5 in Europe, 1 in Asia, 4 in North America, 3 in South America).

Our staff have made notable contributions to nurturing the careers of fellow scholars and defining future directions in the discipline as editors of leading journals (**Herissone**: *Music & Letters*, 2007–19; **Fanning**: *Carl Nielsen Studies*, from 2017; **Hyland**: *Music Analysis Critical Forum* from 2018, Associate Editor from 2020); as editorial board members of international journals and critical editions (**Bithell**: 3 journals; **Fanning**: 2; **Hyland**: 4; **Rutherford**: 4; **Herissone**: 3 critical editions, including Chair of Musica Britannica; *New Grove* advisory committee); and as members of advisory boards for funded projects (**Bithell**: 1 funded project plus the Institute for Music Research (to 2019); **Herissone**: 2 AHRC-funded projects; **Rutherford**: 1 funded project). They have also been engaged as peer reviewers for numerous publications and funding applications, including within the AHRC Peer-Review College (**Cooper**, **Garratt**, **Herissone**), British Academy (**Herissone**), Leverhulme Trust (**Bithell**, **Rutherford**), and for 11 international funding bodies and institutions, including 3 in the USA, 1 in Canada, 1 in South Africa and 6 in Europe (**Bithell**, **Cooper**, **Garratt**, **Herissone**, **Rutherford**). Staff have acted as advisers and external examiners for taught postgraduate degrees at 4 UK institutions (**Cooper**, **Herissone**, **Grange**, **Whalley**), and as PhD external examiners at 12 UK and 4 international institutions (**Berezan**, **Bithell**, **Cooper**, **Fanning**, **Grange**, **Herissone**, **Rutherford**). Musicology staff have assessed book proposals for all the discipline's major academic publishers, and have reviewed over 64 submissions to at least 27 international musicology journals and 10 journals crossing other disciplines, including history, drama, visual cultures, material cultures, politics and cultural studies (**Bithell**, **Cooper**, **Fanning**, **Garratt**, **Hawkins**, **Herissone**, **Hyland** and **Rutherford**).

Since REF2014 we have extended our commitment to impactful research by prioritising more collaborative and outward-looking approaches. This has enabled us to explore shared research interests from both intellectual and creative perspectives, to engage with a wide range of professionals and members of the public, and to bring a sharper focus to our contributions to the worldwide community of music researchers, thereby ensuring that our research benefits communities both within and outside of academia. This provides us with a firm foundation on which to build as we enter the next REF cycle.