

Institution: University of Leeds
Unit of Assessment: 33A (Music)
<p>1. Unit context and structure, research and impact strategy</p> <p>Context and Structure</p> <p>The University of Leeds is making two submissions to Sub-Panel D33. UoA33A comprises researchers in School of Music, one of the largest groups of music researchers in the UK. The School is one of nine in the Faculty of Arts, Humanities and Cultures, formed in 2016 through the merger of the Faculty of Arts and the Faculty of Performance, Visual Arts and Communication with the aim of maximizing research potential by integrating research expertise and best practice in support mechanisms. Among the measures of the success of the merger is that the Faculty is currently the sector leader in attracting AHRC funding, while the School of Music has benefitted from additional study leave apportionment and support for international research activity.</p> <p>Research Strategy</p> <p>Research in the School explores the interaction of music with people, cultures and technologies; by disseminating the knowledge created through this work we advocate for the historic and continuing significance of music in society. Our research is organized around three clusters, which articulate and provide structure for strategic objectives: 1) Music as Culture; 2) Making Music; 3) Music, Science, and Technology. Research in Music as Culture explores music principally of the Western tradition from the seventeenth century to the present day, with strengths in music and theatre, music and film, music and literature, music and cultural identity, post-war music, popular music, and musical aesthetics. In Making Music, our approach is practice-led: our composers write critical and experimental work in acoustic and electronic mediums, while practice-based methodologies characterize our work in historically informed performance. Music, Science, and Technology encompasses music psychology, music and wellbeing and the history and affordances of technology in relation to music. The clusters are also a framework for recruitment of staff and postgraduate researchers (PGRs); they support recently appointed and early career researchers (ECRs), dissemination of outputs, impact and developing work, identification and capture of grant funding, and are entry points for PGRs to the School's wider research culture. Cluster leaders report to the School Research and Innovation Committee (SRIC), and facilitate peer reading of developing research and grant applications. While the clusters articulate our research framework, they are broad and flexible; staff and PGRs participate in multiple clusters and we encourage research that cuts across notional cluster boundaries. For example, Thurley's work encompasses practice as a composer and musicological studies of composers. Ireland's work draws upon music psychology and music and film studies. Venn, McLaughlin, and Burland collaborated on a chapter entitled 'Musicology and its Others' that approaches writing about music from perspectives that inform the sub-disciplines prominent in each cluster: musicology, composition, and music psychology.</p> <p>The School's strategic objectives align with those of the University; in the assessment period we have produced high-quality research outputs including monographs and co-authored books by Cooper, Erraught, Iddon, Ireland, McClelland, Sapiro, Scott, Venn and White, two large-scale critical editions of correspondence by Allis and Iddon, historically-informed performance editions (Brown), award-winning compositions (Thurley's Darmstadt Kranichsteiner Musikpreis for composition), and significant and increased contributions to the field of music psychology (https://music-psych.leeds.ac.uk). This has been achieved through strategies articulated in REF2014 of: 1) encouraging large-scale research projects, supported by sequenced bidding (School, Faculty and other University pump-priming funds, School and Faculty study leave, small grants leading to</p>

major Research Council bids); 2) diversifying grant capture; 3) embedding impact in research projects; and 4) expanding external partnerships. The combination of these strategies has led to trebling of our research grant income in comparison with the last assessment period.

In **Music as Culture**, **Iddon** pursued a long-term research strategy supported through multiple grants (BA Small Grant, AHRC Early Career Research Fellowship, AHRC-funded *John Cage and the Concert for Piano and Orchestra*) leading to a critical edition of correspondence between Cage and Peter Yates, a co-authored book, *John Cage's Concert for Piano and Orchestra*, and a website and apps exploring the *Concert* and *Solo for Piano*. The AHRC grant was developed in partnership with Philip Thomas (Huddersfield) and brought **Payne** as a postdoctoral researcher (subsequently appointed to a permanent post in the School). **Muir's** AHRC-funded *Performing the Jewish Archive (PtJA)* developed through a staged series of grants; a Worldwide Universities Network (WUN) Mobility Grant, a BA Small Grant and a WUN International Research Collaboration Grant supported partnerships with the Universities of York, Sydney and Wisconsin, and research that enabled *PtJA*. This project brought to light a substantial corpus of works by Jewish composers, poets and playwrights from the first half of the twentieth century and made them available through live performance in Australia, South Africa, the Czech Republic, United States, and UK, and in recordings hosted on the *PtJA* website. To research the Trevor Jones Archive, deposited with the School in 2005, **Cooper** and **Sapiro** developed the AHRC-funded *The Professional Career and Output of Trevor Jones*, which brought a PGR (Hall) and postdoctoral researcher (Anderson); the latter co-authored *The Screen Music of Trevor Jones* with **Sapiro** and **Cooper**. The School's first ERC-funded project, **Scott's** *German Operetta in London and New York, 1907-1939*, brought Senior Research fellow Belina to the School. Together **Scott** and Belina co-edited *The Business of Opera* (2015), *Music History and Cosmopolitanism* (2019) and *The Cambridge Companion to Operetta* (2019), and organised workshops and an international conference. This work culminated in **Scott's** monograph, *German Operetta on Broadway and in the West End 1900-1940*.

Within **Music, Science, and Technology**, **Greasley's** work exploring the relationship between music listening and hearing aids was facilitated by the AHRC-funded *Hearing Aids for Music: Exploring the Music Listening Behaviour of People with Hearing Impairments (HAFM)*. This research improved knowledge of how hearing-impaired people understand and use their hearing aids, and of how audiologists can advise on their most effective use in musical settings (see ICS2). **Mooney's** British Library Edison Fellowship and BA/Leverhulme Small Grant led to the AHRC-funded *Hugh Davies: Electronic Music Innovator*. This work has generated a more ambitious study, the groundwork of which is being laid through a BA/Leverhulme Small Grant *Instrumentalizing Electronic Sound 1945–75*. **Mooney's** research has been strengthened by an interdisciplinary faculty partnership with Gooday in the School of Philosophy, Religion and History of Science, and is underpinned by a collaborative approach that has engaged the National Science and Media Museum (Bradford), the Science Museum (London), Access Space (Sheffield) and the American researcher Trevor Pinch (Cornell University), the latter enabled by a Cheney Fellowship. Partners in the new phase of the project include the Musical Instruments Museum (Brussels), Canada Science and Technology Museum (Ottawa), and the Computer History Museum (Mountain View, CA).

In **Making Music** **McLaughlin's** practice-based AHRC Leadership Fellowship, *The Garden of Forking Paths*, developed through partnerships facilitated through the School and the University's Cultural Institute. **McLaughlin** and **Spencer** collaborated with the professional clarinettist Heather Roche to create a co-composed work (*Palmyra*) and workshops for PGR composers in the School. Roche became a collaborator in *The Garden of Forking Paths*, which explores

performer/composer/instrument ecosystems. The project intersects with **McLaughlin's** research on music and ecosystems developed through the University's interdisciplinary Crucible workshops (part of the National Endowment for Science, Technology and the Arts Global Crucible Programme), which supported research on sound creation and ecosystems with researchers in the Schools of Engineering and Earth and Environment. Over the assessment period **Iddon, McLaughlin, Stefani, Spencer and Thurley**, have received 61 composition commissions from national (Britten-Pears Foundation; RVW Trust) and international bodies and festivals (e.g. iN Festival, Seoul, Tzil Meudcan Festival, Tel Aviv) for performers including the BBC Scottish Symphony Orchestra, Ensemble Interface, Mira Benjamin and Séverine Ballon.

Interdisciplinary work is supported through collaborative research and partnerships. School researchers have organised and participated in the annual Sadler Seminar Series, programmes of events funded by the Leeds Arts and Humanities Research Institute (LAHRI), which bring together researchers from different schools in the Faculty. **Venn, Jago and Mooney** collaborated with Popple (School of Media and Communications) and Tim Boon (Science Museum) to offer the Sadler Seminar *Music 625: The Performance of Music on TV, c. 1955–85*. The Cultural Institute's Innovation fund, which engages with Leeds Museums and Galleries, supported **McLaughlin's** project with Jackson (School of Media and Communications) and the Abbey House Museum, *Music, Materiality and Making Sense of Music Collections* (2019).

Over the next five years we will sustain the high quality of our research through continued focus on long-term research projects enabled through diverse and carefully staged grant applications, interdisciplinary partnerships and external collaborations, underpinned by impact. In **Music and Culture**, **Venn's** AHRC Research Leadership Fellowship, *The Operas of Thomas Adés* (June 2020), is part of his sustained engagement with Adés's music; it supports: **Venn's** work toward a monograph on Adés's operas; a network of scholars who are developing a multi-author book on Adés's music; and collaborative impact activities with Opera North. In **Music, Science, and Technology**, **Greasley's** work on hearing aids has led to a collaborative EPSRC grant application (Transforming Music Listening for Hearing-Impaired Individuals). In **Making Music**, ECR **Thurley** is building on his Kranichsteiner Musikpreis with the award of School and Faculty research leave to fulfil commissions from the BBC Scottish Symphony Orchestra and Riot Ensemble.

Impact Strategy

The School's research and expertise has long been of significance to local, national and international communities and organisations; through the assessment period it has significantly strengthened impact activities. The School has increased workload allocation for its Director of Impact, and in 2018 appointed a permanent (0.2 FTE) Impact Support Officer (Pitches). Our commitment to impact—central to our collaborations and strategic approach to grant funding—is, alongside our approach to long-term research trajectories, a fundamental plank of our plan for future sustainability.

All research staff are supported in building impact into their research planning. **Scott's** work in the sociology of popular and light musics from the mid-nineteenth to mid-twentieth century (see ICS1) exemplifies for other researchers in the School the cultivation of impact through research. Likewise, *HAfM* (see ICS2) and *PtJA* have provided exceptional models of integrating impact within research project design.

Our strategy of increasing the visibility of the School beyond the HE sector has led to significant achievements in building partnerships that deliver impact. This has in part been accomplished by

working with the Cultural Institute by targeting its Ignite funding scheme (10 grants totalling £19k since 2014; see *Infrastructure*) and engaging with its Arts and Health strand, to which our Music and Wellbeing research (**Bailes, Burland, Greasley, Payne**) speaks directly. We exploit the University's institutional partnership with Opera North (DARE), as in **Burland's** DARE Academic Residency, the Opera North collaborative PhD hosted in the School and **Venn's** AHRC Leadership Fellowship *The Operas of Thomas Adés*.

The clusters are platforms for research that generates impact through changes in perception and understanding (within society and public discourse), enrichment of cultural life and related economies, policy and practice in relation to cultural organisations, and wellbeing. In terms of users, beneficiaries and audiences, with inevitable crossovers, **Music, Science, and Technology** involves *Working with Charities and Health Organizations*, **Music as Culture** involves *Working with the Media*, and **Making Music** involves *Working with Professional, Semi-professional, and Amateur Performers and Composers*; *Working with Museums and Galleries* falls under the work of all three clusters.

Working with Charities and Health Organizations: Through partnership with Nordoff Robbins, **Bailes** and **Burland** initiated the Music for Healthy Lives Network (<https://musicforhealthylives.org>), which builds on the 2017 All-Party Parliamentary Group publication of the Arts and Wellbeing strategy. The network provides evidence to support existing knowledge of the positive impact of musical experience on health, in order to promote and connect music practitioners to healthcare providers. Working in partnership with the NHS and other health professionals, **Greasley** developed guidance on adjusting hearing aids to facilitate better musical engagement for users.

Working with the Media: **Scott's** research, interviews and performances have reached mass audiences in UK and abroad through mediums including television, radio and videogames (see ICS1). **Cooper, Iddon, Payne** and **Venn** have appeared on BBC Radio 3; **McLaughlin, Muir, Spencer** and **Venn** on local BBC radio channels. Our composers' compositions have been broadcast on radio stations in Ireland, Poland, Portugal, Serbia, New Zealand and the United States; **Iddon** has been interviewed on Deutschlandfunk and WDR, while **Spencer's** music was featured on the SOUNDLAB New Music Podcast. **Spencer's** collaboration with PGR Halay on a new composition for 28 pianos marking the School's Steinway School accreditation received press coverage and has been disseminated through Livestream and YouTube. **Greasley's** contribution to a documentary investigating the physical and mental health of professional DJs has received over 225k views (<https://www.youtube.com/watch?v=mFmfOSt2uCE>). **Bailes's** contribution on earworms for *The Conversation* (<https://theconversation.com/i-just-cant-get-you-out-of-my-head-how-to-eradicate-earworms-58094>) was widely disseminated through social media.

Working with Professional, Semi-professional, and Amateur Performers and Composers: **Brown's** historically-informed performance research has changed cultures of performance and listening, by influencing professional performers including Isabelle Faust, the Eroica Quartet, Ironwood and Rachel Barton Pine; economic impact results via new recordings made distinctive through **Brown's** research. **Brown's** work has been significant in the development of practice-based PhDs at Leeds: several of his PGRs are professional performers specializing in historically-informed performance. His lectures, seminars and workshops with performers in Australia, Europe and the United States continue to influence performing practice. His editions of Brahms's chamber music for solo instrument and piano with performance guide (2016), undertaken with former PGR Neal Peres da Costa, and then current PGR Kate Wadsworth have set a new standard for editions supporting

historically-informed practice. **Muir's** and **White's** choral work with the Clothworkers' Consort of Leeds (CCL) led to impact through partnerships and performances. An Ignite grant enabled **White** and PGR Roberts to create a performing edition of Philip Hayes's *Judgment of Hermes* (1783), and to collaborate with Skipton Camerata (skiptoncamerata.com) and CCL in its first modern performance (2015). **Muir's** research and editions informed CCL's performance in *Music on the Brink of Destruction* at Wigmore Hall, broadcast on Radio 3 (2017). **Iddon** has acted as consultant on three Bärenreiter guides for new music performance techniques (guitar, cello and tuba) and led the tuba and harp composition workshops at the Darmstadt New Music Courses (2018). The recording of Cage's *Concerto for Piano and Orchestra* (Huddersfield Contemporary Records, 2017), influenced by **Iddon's** and **Payne's** research, was the American Record Guide Critics Choice 2018 and was favourably reviewed in Gramophone magazine.

Working with Museums and Galleries: **Mooney's** work with the Science Museum Group develops and influences curatorial practice. His research informed the Science Museum's 2016 *Music and Science* programme of activities and exhibitions by providing detailed information and expertise on a collection of musical instruments and equipment previously owned by the electroacoustic musician Hugh Davies (1943–2005). **Mooney** collaborated with the National Science and Media Museum to make recommendations on the acquisition, interpretation and display of objects of electronic sound for its Sound and Vision Galleries (opening 2022). **Mooney** also co-supervises a Collaborative Doctoral Award, *Objects of Electronic Sound and Music in Museums*, with Knifton (School of Fine Art, History of Art and Cultural Studies) and Jamieson (National Science and Media Museum). **White's** research on the collections of W.T. Freemantle led to an event at the Ilkley Literary Festival (2016) and an exhibition in the University Library's Treasures Gallery (2019); through a related Ignite grant he advised Museums Sheffield on the development of their Freemantle collections. **Muir's** *PtJA* engaged organizations including the British Library where concerts ('Strains of Revolution') including CCL were part of the Library's *Russian Revolution: Hope, Tragedy, Myths* exhibition (2017), and where the final conference of *PtJA* was hosted (2018).

The School pursues University and UKRI policies on Open Access (OA). Since 2014 author-accepted manuscripts for subscription journals have been uploaded to Symplectic, the University's research outputs management system, and made available through Green OA at White Rose Research Online (<https://eprints.whiterose.ac.uk>), facilitated by the Library's Research Support Unit. Where appropriate, research data is made available freely through the Research Data Leeds Repository (<http://archive.researchdata.leeds.ac.uk/information.html>); e.g. **Mooney's** curated performances of live electronic music compositions by Hugh Davies). Scores and performances of compositions by **Iddon**, **McLaughlin**, **Spencer**, **Stefani**, and **Thurley** are freely available through streaming sites and personal websites. Websites for *HAfM*, *PtJA*, *The Professional Career and Output of Trevor Jones*, *German Operetta in London, New York and Warsaw*, and *The Garden of Forking Paths* host freely accessible research outputs including conference papers, performances of music and drama, scores, programmes and data sets. **Iddon's** AHRC project generated a freely accessible website (cageconcert.org) incorporating extensive text and media resources and two apps allowing users to make individual realizations of the *Concert for Piano and Orchestra* and to make realizations for performance of the notations from the *Solo for Piano*. Strategic University funding supporting the impact of **Greasley's** work enabled Gold OA for her article in the *International Journal of Audiology*; **Scott's** *German Operetta on Broadway and in the West End, 1900-1940* is available through Gold OA secured with ERC funding.

In compliance with institutional policy, ethical approval from the Faculty Research Ethics Committee (FREC) is sought for all research (staff and PGR) involving the collection of data from participants. Each school in the Faculty is represented on the FREC by an Ethics Lead, who takes part in reviewing applications. Work in music reviewed through this process includes interviewing/observing composers and performers; surveying music consumers for aesthetics research; and pedagogy research projects. Through FREC the School influences Faculty ethics policy and processes, including considerations of ethics in practice-led research. FREC provides guidance on data storage and protection, and all research staff are required to complete the University's online data security training.

2. People

Staffing strategy and staff development: The strategic objective of sustaining our profile in historical, critical and popular musicology, aesthetics, music psychology, music technology, composition, and performance studies has led to new appointments in each research cluster over the assessment period. **Venn, Pritchard, Jago** and **Erraught** have strengthened **Music as Culture**, while **Cooper** retired in 2018 and **Scott** in September 2020. The School recruited **Bailes** through the University's Academic Fellows scheme, through which researchers follow a five-year development programme leading to a permanent position at Associate Professor level. Her appointment in **Music, Science, and Technology**, along with that of **Payne**, supports our leading position in music psychology, with six researchers in this specialism (also **Burland, Greasley, Ireland** and **Windsor**). The appointment of **Thurley** and **Payne** (who also has specialism in performance studies) has enriched **Making Music**, while **Brown** has retired (2016). Our staff profile covers all career stages, from ECRs to senior researchers (21 researchers; 5 Professors; 13 Associate Professors/Senior Lecturers; 5 Lecturers including 2 ECRs). Promotions (detailed below) have developed a new generation of research leaders to replace retiring professors. Our FTE of staff submitting to REF has increased by 24% since the previous exercise (2014: 14.9; 2020: 19.6). The School provides security to researchers through permanent appointments. **Jago** (who left for another post in 2018), **Payne, Pritchard** and **Thurley** moved from fixed-term to permanent positions during the assessment period. All research-active staff are on permanent contracts, a position we will maintain apart from recruitment through research grants that support fixed-term appointments only.

The School's strategy of supporting and developing research staff aligns with that of the University: in the review period there have been three internal promotions to Chair (**Allis, Burland, Windsor**), and eight to Associate Professor (**Bailes, Greasley, Jago, Mooney, Pritchard, Sapiro, Stefani, Venn**). The University paused its promotions process from April to the end of July 2020; at its resumption **Venn** was promoted to Professor. The University is a signatory to the Researcher Development Concordat, and the School adheres to the principles of that agreement. Induction, probation and the Staff Review and Development Scheme (SRDS) are defined at institutional level, with mandatory training for reviewers, and introductory and developmental programmes run through Organisational Development and Professional Learning (OD&PL) and the Research and Innovation Service (RIS). Annual Academic Meetings (AAMs) are a vital part of the School's strategy; each researcher meets with the Head of School, Director of Research and Innovation (DoRI), and the Director of Student Education to review and develop individual strategic research and impact plans, and to integrate these in the wider strategies of the School. Written feedback, guidance and action points are provided to reviewees, and discussions help to inform the School's collective strategy and progress, which are considered in the SRIC. Discussions include supporting staff toward research leadership roles in the School (DoRI, Director of Impact, DPGRS) and at Faculty, University and sector-wide levels. These processes help ECRs and mid-career researchers identify activity that will build their

profiles and progress in relation to institutional promotional criteria. The close alignment of School and University research strategies ensures that the breadth of research activity (publication, grant capture, impact, PGR supervision, research leadership) are recognized through pay awards and promotion. New staff and ECRs are additionally supported by a probation mentor. AAMs and the research clusters provide opportunities for mentoring for any researcher by senior members of the School.

All researchers are allocated research time in their workloads (0.2 FTE) and are encouraged to apply for research leave through competitive internal and external schemes. The School scheme allows for applications one semester in seven; the process is aligned with that of the Faculty scheme (see below); applications are judged by the SRIC on the criteria of intellectual merit, originality and academic significance, and for the outcomes and benefits as they relate to the School's research strategy. Changes in research leave arrangements have added flexibility to allow partial leave awards in instances where this may better fit individual circumstances. Seventeen awards (all but three of a full semester) were made to twelve different researchers in the assessment period. All researchers can draw up to £800 annually for research activity and ECRs can access additional funding for the development of their research work. Allocation of School leave and funding supports the School's strategy, research projects and impact, for instance by funding conference travel or for dissemination and impact activity. Membership in the new Faculty has increased access to support through the Faculty Research Leave Scheme, which is open to competitive application for matching leave by individuals who have succeeded at School level (e.g. **Mooney, Thurley, Venn**). The Laidlaw Undergraduate Research Leadership Scholarships, funding six-week work periods with School researchers in two consecutive summers (as well as leadership development activities year round), bring students into research projects and demonstrate our commitment to embedding research in our teaching; students engage in archival research, data collection and analysis and other activities, are trained and gain practical experience in research methodologies, and develop interests and skills that can inspire them to pursue postgraduate study. This work has led to student and researcher joint-authored publications, conference papers and online exhibitions. Projects have been led by **Bailes, Burland, Muir, Venn** and **White**. PGR studentships, postdoctoral posts and research fellows are built into grant bids where possible (e.g. *The Screen Music of Trevor Jones, PtJA, HAFM, John Cage and the Concert for Piano and Orchestra* and *German Operetta in London, New York and Warsaw*).

Postgraduate Researchers

The School recruits PGRs across all clusters; we have sustained a thriving community over the assessment period during which we have awarded almost 50 PhDs. The School recruits high-quality PGRs through the White Rose College of Arts and Humanities (WROCAH, see *Infrastructure*) studentship competition. It offers the Stanley Burton Research Scholarship annually and encourages applications to the highly competitive Leeds Doctoral Scholarships and the Faculty's Doctoral Scholarships. In the review period the School has supported Collaborative Doctoral Awards with Opera North and with the National Science and Media Museum and through a collaborative network in which candidates have a supervisor in two of the three WROCAH institutions (Universities of Leeds, Sheffield and York). Irrespective of funding basis, the School has attracted high-calibre candidates, including Richard Barrett ('Britain's most radical and innovative composer of the present' in *Musical Opinion* 2002), who, through a Stanley Burton Research Scholarship, completed a practice-led PhD in 2018, and the professional violinist Hazel Brooks (<http://hazelbrooks.co.uk>), who holds a WROCAH studentship. The School supports full-time and part-time modes of study with flexibility to move between the two as best suits individual circumstances. PGRs are allocated

primary and secondary supervisors and receive a minimum of ten or six supervisions annually according to full-time or part-time registration. PGRs are also offered an annual review with the Director of Postgraduate Research Studies (DPGRS), at which supervisors are not present, to discuss supervision arrangements and progress. Toward the end of the first year of study (c. 10 months full-time, 20 months part-time) PGRs submit an upgrade document, which is examined through a viva. Successful candidates transfer to full-PhD status. The University is committed to equality of opportunity (see <http://www.leeds.ac.uk/rsa/support/disability.html>) and its Graduate Board and Faculty Graduate School ensure consistent application of policy. The School has strong representation on these bodies (e.g., **Spencer** is Head of Faculty Graduate School). Students undertaking cross-disciplinary research with supervisors in two schools (six students, co-supervised in four different schools: Computing, Education, Fine Art, History of Art and Cultural Studies, and Performance and Cultural Industries) receive the same opportunities available to those supervised solely within the School.

In consultation with supervisors, each PGR constructs a training plan, progress against which is measured biannually, and additional training needs are identified over the course of the degree. Training includes interactive online courses for induction and transfer to full PhD. Training in HEI-teaching is available; those who complete relevant training can apply through a transparent process (with CV, cover letter and interview) for teaching opportunities in the School. Training is delivered through the Leeds Doctoral College (https://www.leeds.ac.uk/info/130558/leeds_doctoral_college) in conjunction with OD&PL. The University also invests significantly in the WRoCAH Doctoral Training Programme, which includes distinctive features facilitating collaboration between PGRs and non-HEI external partners and a strong international dimension.

Training plans are maintained online within the University's Graduate Record of Achievement and Development (GRAD), which includes a training needs analysis tool based on the Vitae Researcher Development Framework. Supervision meetings, transfer, and formal reports on progress are logged in GRAD, which is easily updated and maintained by staff and PGRs and enables efficient and responsible record-keeping for all parties.

The School's PGRs run biannual Postgraduate Research Symposia at which they gain experience of conference presentation through the delivery of research papers to peers, staff, and external researchers. PGRs are encouraged to participate in Faculty- and University-wide events, including the Leeds Doctoral College Showcase. Our PGRs have won awards at the annual Postgraduate Researcher Poster Conference (Ulor, 2018, first prize), and the Three-minute Thesis (Cameron, 2018, second prize). PGRs are invited to present work in Research Cluster Lunches and through the School's Research Colloquia, an annual series of research lectures delivered by School and visiting researchers. The School's Music Psychology Research Group (<https://music-psych.leeds.ac.uk>) is convened by PGRs who plan and coordinate the content of monthly meetings that are also attended by staff. PGRs from the School benefit from Faculty Employability training and in 2019 won a Faculty Interdisciplinary Research Support Award to run a workshop on peer review.

Music PGRs attend major conferences (e.g. *Biennial Conference on Baroque Music* (2016, 2018); *International Conference on Music Perception and Cognition* (2018)) as well as organising events with the support of staff (e.g. *RMA Study Day Music and Mathematics* (2014); *RMA Study Day Amateur Music-Making in the British Provinces* (2014); *RMA Study Day (Per)Forming Art 2015: Performance as Research in Contemporary Artworks* (2015); *RMA Study Day Exploring Xenakis Symposium* (2016); and *Crippling the Muse* (2018)). Some of these events have led to publications

(see those by Halay and Bekova below). £150 per full-time year is available to PGRs to support research activity with a further £100 for delivering papers at an international conference. Such support has helped enable PGRs to publish in refereed journals and edited books during their candidature (e.g. Halay (ed.), *(Per)Forming Art: Performance as Research in Contemporary Artworks* (Cambridge Scholars Press, 2016); Bekova (ed.), *Exploring Xenakis: Performance, Practice, Philosophy* (Vernon Press, 2019), Addison, 'William Shield's *Favourite Songs, 1775*', in *Music in North-East England, 1500–1800* (Boydell, 2020)).

Equality and diversity

The School promotes equality of opportunity for all PGRs and research staff. Training, support, research funding and leave opportunities are available according to transparent criteria. Part-time researchers share the same access to research support as full-time researchers (i.e. research leave, internal research funding, etc.) and the School observes both the Fixed-Term Employee and Part-Time Worker Regulations. In keeping with institutional policy, the School's staffing, appointment and promotions data contribute to the monitoring of Equal Opportunities and relevant panels and committees include representation from outside the School and observe the University's well-established policies. Promotion criteria relating to research are shared across the institution, following consultation on local priorities, and make clear accommodations in relation to part-time staff, caring responsibilities, disability and special circumstances. The School supports flexible and remote working in negotiation with the Head of School and institutional HR. A significant increase in remote working required by the response to COVID-19 has been supported by providing IT and working environment equipment in response to staff requests. Support for travel, conference attendance and other research activity is available to all researchers through the School research fund and additional support for international activity is provided through the Faculty's international conference fund and research mobility fund.

There has been an improvement in gender balance in staffing since the last assessment period measured against FTE researchers submitting outputs (2014: 13% female; 2020: 19% female). During the current period the School promoted its first female professor, who is also the first female head of school (**Burland**). Through mentoring and AAMs the School encourages researchers to participate in the University's programmes to support female staff including the Women Rising, Springboard and Aurora schemes. We have achieved good gender balance amongst PGRs earning doctorates in the assessment period (25 female; 22 male); these candidates represent thirteen nationalities.

The School follows the University's REF Code of Practice. Identification of outputs to be considered for submission has taken place through AAMs and conversations with the DoRI who is also UoA lead. The primary criteria for selection of outputs has been quality of research with assessments based on internal and external scrutiny. This has followed the University's Code (especially Part 4: Selection of Outputs). All staff have been invited to declare confidentially circumstances affecting their ability to research productively over the assessment period, and any such circumstances have been considered by the University's Equality and Inclusion Team as described in the Code.

Staff wellbeing (including the University's Staff Wellbeing Survey) is considered within the School's Senior Management Team, in full School Committees and in the triannual School Staff Development Forum. The School accommodates researchers with disability or long-term illness through relevant adaptation of the working environment (both physical and in terms of working time and conditions) with guidance from the University's Human Resources team. A flexible approach to workload is taken

in discussion with researchers returning from extended periods of leave. PGR wellbeing is monitored through supervisors, the DPGRS and by addressing any issues that come to light in the annual Postgraduate Researcher Experience Survey.

3. Income, infrastructure and facilities

Income

The total value of grant income in the assessment period exceeds £3.3 million, an achievement stemming from the School's focus on large-scale projects, diversifying grant capture, embedding impact and expanding partnerships. As demonstrated in Section 1, these grants have led to significant research outputs and impact. Grant successes include *The Operas of Thomas Adés* (PI **Venn**, AHRC, £108,306), *The Professional Career and Output of Trevor Jones* (PI **Cooper**, CI **Sapiro**, AHRC, £466,856); *Musical Leisure: Exploring Identities at Work and Play* (PI **Burland**, BA, £3,080); *HAfM* (PI **Greasley** AHRC, £179,399); *John Cage and the Concert for Piano and Orchestra* (CI **Iddon**, AHRC, £233,972); *Hugh Davies: Electronic Music Innovator* (PI **Mooney**, AHRC, £107,381); *Instrumentalizing Electronic Sound 1945–75* (**Mooney**, BA, £9,075) *PtJA* (PI **Muir**, AHRC, £867,400); *Archival Connections: Relating Creative and Performing Practice in Early Broadway Musical-Theatre Works* (PI **Sapiro**, BA, £9,980); *The Garden of Forking Paths* (PI **McLaughlin**, AHRC, £200,072); *German Operetta in London and New York, 1907–1939: Cultural Transfer and Transformation* (PI **Scott**, ERC, €1,061,762).

Through AAMs a half-day per week is allocated to researchers for the preparation of funding bids, on top of statutory research time in workload modelling. AAMs encourage researchers to build long-term research plans (see Section 1) and to consider how, and which grant schemes may enable this work. Research proposals and grant applications are shared in development stages within research clusters and with colleagues with a history of grant success. School researchers engage with LAHRI grant-writing workshops; peer reading and examples of good practice are provided by the School and Faculty. Likewise, researchers benefit from School and Faculty Impact Support Officers and workshops on impact generation offered regularly through the LAHRI and OD&PL. Researchers also draw on institutional knowledge within the Cultural Institute in the development of partnerships, and on RIS and the Faculty Research Office (FRO, see *Infrastructure*) for financial and administrative advice.

Infrastructure

Our activities intersect with research throughout the Faculty and are supported by the LAHRI, peer-review, and sharing of best practice. A Faculty Research and Innovation Committee meets monthly as part of the University's deliberative structures, feeding business to and from the SRIC, facilitating discussions on strategic and operational matters. The School considers the balance between scholarly and operational priorities through the SRIC and the School Management Committee. Annual planning, led by the Faculty and University, focuses on strategy and investment, including monitoring of research performance, and feeds into an Integrated Planning Exercise, agreed between School and Faculty and subsequently presented to University senior management.

Pitches (0.2 FTE Impact Support Officer) takes the same role in the School of Performance and Cultural Industries (0.2 FTE) and in the School of English (0.5 FTE) and is able to share and develop best practice and broker interdisciplinary peer-review. The School works with the Faculty's full-time Impact Officer (recruited 2017) and connects impact strategy with Faculty initiatives (through the Faculty Impact Committee). Through these means our impact strategy has been fully embedded within that of the Faculty's over the assessment period.

The Faculty's research leave scheme augments that of the School's. Both recognize grant writing and impact alongside traditional research outputs as activity for which leave is offered. The Faculty also provides funding for delivering papers at international conferences through the Faculty International Conference Fund, and for activity targeted at the development of international research collaborations through the International Research Mobility Scheme (funding 7 and 4 School researchers respectively since 2016).

Interaction with the LAHRI and the University's Cultural Institute has been crucial to executing our research strategies. The LAHRI creates opportunities for collaborative and interdisciplinary work by supporting the development of emerging research projects, providing a context for creative scholarly discussions, and helping with winning and running successful research bids (e.g. **McLaughlin's** and **Venn's** AHRC Fellowships). The Cultural Institute brings together University researchers with professionals and organizations from the creative sector in order to foster innovative research collaborations. It brokers conversations between academics and external partners, strengthening existing partnerships and acting as a catalyst for new ones. A programme of creative labs, workshops, awards and prizes helps to nurture these connections. For Music, the Institute's Ignite grant scheme (bids of £500–2000) supporting the development of interdisciplinary research partnerships with external organizations (e.g., National Science and Media Museum, North Yorkshire Music Therapy Centre; see also Section 1) with a focus on impact has been particularly important. Practice-led research is significant aspect of the School's and the Faculty's work; it is, in part, supported through the Centre for Practice Research in the Arts (CePRA), co-directed by **McLaughlin** and **Stefani** who have expanded its role through interaction with the larger number of schools in the new Faculty, where its sits within the LAHRI.

The FRO provides extensive support for grant activity, directing researchers to appropriate schemes, and offering detailed advice on budgeting, technical reports, staff costs and recruitment. Researchers review budgets and progress on active grants with the FRO and Pro-Dean for Research and Innovation (PDRI) as part of a biannual grant 'health-check'. The FRO has pre- and post-award teams, with a Research Manager reporting to the Faculty Finance Manager and PDRI. The RIS monitors all institutional research and provides a consistent framework for ethical considerations and relationships with external partners. An institutional online system for modelling and managing research grants from conception to final report (KRISTAL) integrates all associated online systems, data and processes (e.g. ethical approval), and enhances academics' communication with the FRO.

Music engages actively with the White Rose Consortium, a strategic partnership between the Universities of Leeds, York and Sheffield. Many School outputs receive OA publication through the Consortium's research depository: White Rose Research Online. The School attracts WRoCAH doctoral scholarships and participates in WRoCAH network grants (**Bailes** and **Windsor**, Expressive Ensemble Performance; **Mooney**, Electronic Soundscapes).

Facilities

A diverse range of high-quality facilities are housed in purpose-built premises, attached to the historic Clothworkers' Centenary Concert Hall (CCCH). Strategic development of the CCCH and its Foyer over the assessment period has included the installation of audio-visual capture (Vimeo-Livestream) to enable streaming of concerts and conferences. CCCH is the venue for the University's International Concert Series administered by the School. It regularly features performances relating to staff and PGR research. Many of these performances are freely available and archived through

Livestream. The School houses a unique collection of materials from the film-score production process donated by composers Trevor Jones (source material for **Cooper** and **Sapiro**'s AHRC grant) and Michael Nyman. The University Library has exceptional music holdings. Purchasing is monitored by the School (via SRIC), ensuring that research needs are represented. The Library's Special Collections houses important collections of early music prints and manuscripts, including autographs of Croft, Dibdin, Mendelssohn and others from the Freemantle Collection (explored in **White**'s 2019 exhibition in the Library's new Treasures of the Brotherton Gallery), the Fiske-Platt Collection (c.1,500 prints and manuscripts, mainly of English opera, song and instrumental music 1700–1850); and the Priestley Collection (c.100 prints of early nineteenth-century church music). The University's DARE partnership facilitated Opera North depositing its archives in the Library's Special Collections. Likewise, the University's role as principal partner with the Leeds International Piano Competition (LIPC) has led to the acquisition of the Dame Fanny Waterman Archive. Both archives provide a platform for future research by researchers within and without the School. The Library's physical facilities include the new Laidlaw Library (completed 2015) and the refurbished Edward Boyle Library (completed 2017, including a PGR Research Hub) in addition to the Brotherton Library. Together they house a dedicated music collection, with extensive electronic resources. In December 2017 the School gained All-Steinway Status with the delivery of 27 Steinway pianos, a development that helped facilitate the formal partnership with the LIPC. Other musical instruments include: Goetze and Gwynn chamber organ, harpsichords (2), virginal, nineteenth-century grand pianos by Erard (2) and Broadwood, Adlam-Burnett Viennese-type fortepiano, early orchestral instruments, Bass flute, and Bass clarinet (purchased in 2018 to support staff and PGR composition). The School houses two ProTools/Logic Pro X 32-track digital recording studios; a 24-track digital recording studio; electronic composition suite; music psychology laboratory with multimedia recording and analysis equipment, Disklavier and other technology; two recently refurbished postgraduate iMac clusters with specialist audio and data analysis software.

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

Collaboration

As evinced in Section 1, the School's commitment to collaboration underpins the vitality and sustainability of our research activity. Collaboration has aided the development of the quality of our research, has widened its impact, and has strengthened our applications for research funding. Our collaborations are arranged through a variety of means and range from individual scholars to extended scholarly networks, and to external partnerships outside of HEIs. **Scott** and **Burland** worked with the M&S Company Archive (housed at the University) on the project *Stories from M&S Sheet Music: Leeds Piano Heritage*, which also engaged the LIPC. The Cultural Institute supports School collaborations through Ignite funding and Creative Labs (pairing creative professionals with researchers from the University), which have brought collaborators beyond the Institute's core partners. AHRC grants (**Cooper**, **Greasley**, **Iddon**, **Muir**, **Sapiro**, **Venn**), WRoCAH Network grants (**Bailes**, **Mooney**, **Windsor**), and a Royal Society of Edinburgh network grant (**Bailes**, **Greasley**, **Iddon**, **Scott**) have supported collaboration with academics at other institutions and non-HEI partners. Faculty Research Mobility Grants and exchange programmes (**Erraught**, **McLaughlin**, **Muir**, **Payne**, **Venn**) have supported developing partnerships (Universities of Delhi, Hong Kong, Stellenbosch, Utrecht). Researchers have developed bespoke networks through conference attendance, publication, and other research activity. Indicative collaborations and resulting impacts and outputs, articulated through our clusters follow below.

In **Music, Science, and Technology**, **Greasley** has worked with 36 NHS trusts through *HAFM* and has engaged with audiologists and the hearing impaired (see ICS2). In the field of Music and

Wellbeing, **Bailes** and **Burland** have established a partnership with North Yorkshire Music Therapy Centre on the project *Mapping a Music Therapeutic Landscape in Rural Communities* and with Skiddle (<https://www.skiddle.com/>) to investigate the wellbeing associated with attending music events. **Burland's** DARE residency at Opera North investigates the nature and impact of a professional career in music. Collaboration with external researchers has resulted in a large corpus of joint-authored publications including journal articles by **Bailes**, D'Amario (York), Daffern (York) in *Journal of Voice*, *Frontiers in Psychology* and *Logopedics Phoniatrics Vocology*, by **Bailes** and Presicce (Hull) in *Psychomusicology*, by **Bailes** and Dean (Western Sydney University) in *Journal of New Music Research*, *Music Perception*, and *Psychology of Music*; **Burland**, Hill (York, St. John), King (Hull), and Pitts (Sheffield) *Psychology of Music*; **Greasley**, Chung and Hu, *Psychology of Music*. Co-edited journal issues include: *Organised Sound*, **Mooney**, Schampaert (PGR) and Boon (Science Museum). Co-edited books include *Coughing and Clapping: Investigating Audience Experience* (**Burland** and Pitts (Sheffield)). Book chapters have been produced by **Greasley** and Lamont (Keele), by **Greasley**, Lamont and Sloboda (Guildhall) and by **Windsor** and Bisesi (Institut Pasteur) in *The Oxford Handbook of Music Psychology*; **Payne** and Schuiling (Utrecht) have collaborated on a co-authored chapter.

In *Making Music*, **Stefani** led community-based workshops for synthesizer ensemble in the Fuse art space in Bradford, followed by a public performance at The Tetley contemporary art space in Leeds in 2016. Collaborative partnerships are central to the compositional work of **Iddon** (Jack Adler-McKean) **McLaughlin** (Zubin Kanga), **Spencer** (Ian Pace), and **Thurley** (Barbara Konrad). All four have collaborated with the clarinetist Roche who is a partner in **McLaughlin's** *The Garden of Forking Paths* with Sharp (Open University) and the institutional partner, the Royal Northern College of Music.

As part of *Music as Culture* partnerships with national and international organizations, including the British Library, were a hallmark of *PtJA*. The five festivals (Australia, Czech Republic, South Africa, United Kingdom and United State) run through the project attracted combined audiences of over 7.5k and involved partnerships with the Universities of Sydney, Wisconsin and York. *John Cage and the Concert for Piano and Orchestra* was a collaboration with Thomas (Huddersfield) and led to joint-authored publications (**Iddon**, **Payne** and Thomas; **Iddon** and Thomas; **Payne** and Thomas). **Scott** and **Allis** have developed a partnership with Paul Watt (Monash, Australia) leading to three co-edited books: *Cheap Print and Popular Song in the Nineteenth Century* (**Scott** and Watt, 2017), *The Symphonic Poem in Britain 1850–1950* (**Allis** and Watt, 2020) and *The Oxford Handbook of Music and Intellectual Culture in the Nineteenth Century* (**Allis**, Watt, Collins (University of Western Australia), 2020). The latter originated in a conference convened by the co-editors, *Music Literature, Historiography and Aesthetics*, IMR University of London (17-18/07/2014). **Scott's** collaboration with the Sibelius Academy, Helsinki has led to co-edited books *Confronting the National in the Musical Past* (with Kelly (Edinburgh) and Mantere (Helsinki), 2018) and *Music History and Cosmopolitanism* (with Belina and Kilpiö (Helsinki), 2019). Other collaborative research publications include co-edited books *Lady Gaga and Popular Music: Performing Gender, Fashion and Culture* (**Iddon** and Marshall (UC Cork)); *Musical Exchange between Britain and Europe 1500–1800* (**White** and Cunningham (Bangor)); and a special edition of *The Journal of Film Music* (**Sapiro**, Anderson (Maynooth)).

Contributions to the discipline and research base

Our researchers take leadership roles and shape the practices and policies of the sub-disciplines within the field of music. Since 2014 our researchers have held editorial positions in leading journals and societies: **Allis**, *Journal of Victorian Culture*, *Nineteen: Interdisciplinary Studies in the Long*

Nineteenth Century; **Bailes**, *Music Perception, Musicae Scientiae*; **Burland**, *Musicae Scientiae, British Journal of Music Education*; **Payne**, *Music and Science*; **Scott**, *The Victorian Web*, **Venn**, *Music Analysis*; **White**, editorial board of the Purcell Society. They contribute to a range of research organisations as reviewers and consultants: *The Research Council of Norway*, and the *European Commission (Bailes)*; jury membership for Staubach Fellowships at the Darmstadt New Music Courses (**Iddon**), Chair of the Schubert Institute UK (**McClelland**); team member on *Romantic National Song Network*, and *Music in Finnish Cities (Scott)*. **McLaughlin** is the coordinator of the RMA Practice Research Study Group and has contributed example projects to the Practice Research Advisory Group, UK.

Scholarly awards signal recognition of our research contributions: **Allis** won the C.B. Oldman prize of the International Association of Music Libraries, Archives and Documentation Centres (2018) and was runner up for the *Music & Letters* Westrup Prize; **Greasley** was nominated for the AHRC Health Humanities Medal Inspiration Award. **Iddon** was winner of the 'Chamber' category (2014) and shortlisted (2016) in the 'Solo/Duo' category in the British Composers Awards. **Scott** was awarded an honorary doctorate by the Sibelius Academy, Helsinki (2018). **Thurley** was winner of the Darmstadt Kranichsteiner Musikpreis (2018).

Our researchers hold visiting appointments at a number of institutions: **Allis**, Adjunct Senior Research Fellow (Monash); **Iddon**, Faculty member (Darmstadt New Music Courses); **Mooney**, Science Museum Group Research Associate; **Scott**, Adjunct Senior Research Fellow (Monash), Hartley Visiting Professor (Southampton). School researchers have given 67 invited lectures (including seven keynotes) in Australia, Austria, Estonia, France, Germany, Ireland, Norway, Spain, the US and the UK. They have acted as external examiners for research degrees in 1) the UK: Bangor, Bath Spa, Birmingham Conservatoire, Cambridge, Canterbury, City, Durham, Edinburgh, Goldsmiths, Huddersfield, Keele, Nottingham, Manchester Metropolitan, Royal Northern and Surrey; and 2) abroad: Australia: Monash, Newcastle, Sydney Conservatorium, University of New South Wales; University of Victoria, Canada; Geneva, New York University; Odeion School of Music, SA; Oslo; Otago, NZ. Our PGRs have advanced to positions in HE and in the arts sector: **Thurley**, Strickson, Belinfante (U. of Leeds), Morrison (U. of Chester); Roberts, Head of Music, Benslow Music Trust; French, presenter on BBC Radio 3 and author of *Sir Henry Wood: Champion of J. S. Bach* (Boydell, 2019).

International conferences hosted by the School have provided important support for the Music discipline and have engaged many non-academic partners. These have included the *RMA 50th Annual Conference in parallel with Music for Audio-Visual Media* (4–6/09/2014); and *Song, Stage and Screen XIV* (26–29/06/2019). **Muir** engaged the Jewish Musical Institute with *Continuities and Ruptures: Artistic Responses to Jewish Migration, Internment and Exile in the Long Twentieth Century* (6–8/07/2014) and *Magnified & Sanctified: The Music of Jewish Prayer*. **Greasley's** research engaged British Audio Research Network, *Music for Audio-Visual Media II* (20–22/06/2016); NHS, Help Musicians UK, Ewing Foundation for Deaf Children, 10 companies in the hearing impairment sector, *Hearing Aids for Music* (14–15/09/2017). **Scott's** ERC grant funded *Gaiety, Glitz and Glamour, or Dispirited Historical Dregs? A Re-evaluation of Operetta* (10–12/01/2019); **Iddon's** AHRC grant funded *Performing Indeterminacy* (30/06–02/07/2017). Other research specialisms have driven conferences, sometimes with external partners: *Musica Britannica, RMA, Critical Music Editing Study Day: Methodology, Sources, Repertoire, 1600–1900* (4/10/2014); WUN, *Performing Brahms in the Twenty-first Century* (30/06–2/07/2015); *Reconceiving Bartok's Music* (03/16/2016); *SEMPRE: Collaborative approaches to music and wellbeing research* (9–10/11/2018); *BBC History and*

Heritage Music 625: The Performance of Music on Television, c.1955-85 (7–9/06/2019). Collaborative work has supported conferences at other locations, including **Muir**, Dobbs (Wisconsin-Madison), Fligg (RNCM), Ridgewell (British Library), *The Future of the Archive: Performing the Jewish Archive and Beyond* (14–16/01/2018), and **Venn**, *The Operas of Thomas Adès*, Senate House, London (24–25/04/2017)).