

<b>Institution:</b> Royal Northern College of Music
<b>Unit of Assessment:</b> 33 - Music, Drama, Dance, Performing Arts, Film and Screen Studies
<p><b>1. Unit context and structure, research and impact strategy</b></p> <p><b>Unit context and structure</b></p> <p>The Royal Northern College of Music (RNCM), a small and specialist higher education institution, is a world-leading international music conservatoire preparing students from a wide range of backgrounds for a professional career in music. Recognised as one of the world's leading conservatoires and public music venues, it is a vibrant, forward-looking institution, home to some 900 highly talented young musicians from 60 different countries and supporting the development of musicians regionally, nationally and internationally. For more than a decade, the RNCM has supported, developed and nurtured a dynamic research environment for staff, students and audiences, sustained by clear research structures and institutional investment in research.</p> <p><b>RNCM 2020 Strategic Plan (2015-20): aims for Research</b></p> <p>The RNCM was successful in REF 2014, particularly regarding the quality and impact of its research, receiving 100% for Impact and a 70% increase in QR research funding. The RNCM's institutional Strategic Plan outlined four main aims for research:</p> <ul style="list-style-type: none"> <li>• increase RNCM research that is world-leading, internationally excellent, and practice-led,</li> <li>• strengthen connections between learning and teaching, research and the College's artistic programme,</li> <li>• fully integrate both performance and research with all aspects of students' learning, and</li> <li>• grow RNCM research degree programmes so as to be ready to apply for Research Degree Awarding Powers (RDAP) by 2020.</li> </ul> <p>The Research Strategy (2015-2020) was closely aligned to the research ambitions of the College. In addition to the four areas above, it also aimed to promote the RNCM's resources, in particular, the College's archives and Collection of Historic Instruments (CHI).</p> <p>The Strategy was designed to increase the visibility and reputation of research at the RNCM by committing to increasing the number of staff participating in research activity and supporting internationally recognised research across musical disciplines. It also aimed to increase income from research grants between 2015 and 2020, and enhance the growing doctoral programme by increasing supervisory capacity, developing provision of high-quality specialist research training and preparing for RDAP.</p> <p>The Strategy committed to increasing research that is world-leading, internationally excellent and practice-led; increasing the number of staff engaging in research that leads to outputs classifiable as 'internationally excellent' or above, reaching the target of submitting at least 15.0 FTE staff in the current research assessment exercise (2021). Since REF 2014, RNCM has built research capacity and quality through mentorship, training, increased internal funding and recruitment within five sub-disciplines of music (Performance, Composition, Musicology, Music Psychology and Music Education). In 2014, the College submitted 10.78 FTE to the REF; in 2020 it is submitting 19.62 FTE, notably above the strategic target of 15 FTE. All areas have been strengthened by new appointments of individuals with strong research profiles (see People). A new research area, Music Education, has emerged since REF 2014, this being a major focus of the institutional 2020-2025 Strategic Plan. Building on the example of the Centre for Music Performance Research, which focuses on music psychology and research on musicians' health and wellbeing, research groups have developed out of existing activity and collaborations into a number of cross-disciplinary themes. Many have an important element of practice-as-research, notably the Hub for Artistic Research in Performance (HARP), Centre for</p>

Music and Conflict, Exploratory/Experimental Music Research Centre and the Centre for Practice & Research in Science & Music (PRiSM). RNCM has considerably increased its research income from a range of funders, including AHRC, Research England, the British Academy and the European Commission; considerably exceeding the targets set in the 2015-20 Research Strategy (see Income).

The Research Strategy prioritised strengthening the links between research, the College's artistic programme and the curriculum. The College has one or more major themes around which to focus its performance and research activity each year. The French Connections theme included an ambitious collaboration with the Paris Conservatoire, involving students at all levels of study in Festivals (notably Chamber Music), concerts, student electives, and an international Debussy conference and festival. 'We are Migrants', a theme in 2019-20, included composition and performance students contributing to the Michael Kennedy International Research Lecture. Fruitful cross-College collaboration also occurred during the New Music North West Festivals (now New Music Manchester) and in the Decontamination concert series (Centre for Exploratory/Experimental Music), in which music by staff and students was performed alongside external professionals. These activities contributed to the RNCM's ongoing strategy to be 'a laboratory for creativity and innovation in artistic practice'.

Linking research to the artistic programme is fundamental to maximising the impact of the College's research within the community and society more widely, and takes advantage of the College's distinctiveness in being both an HEI and a public Arts Centre. This link constitutes an important aspect of its Impact strategy. The College has a strong relationship between the Performance Programming Department and Research to ensure that research activity engages with as many potential audiences as possible, regionally, nationally and internationally. Recent and current priorities are to address key societal and creative sector issues in relation to Artificial Intelligence (AI), climate change, audience research and equality, diversity and inclusion (EDI) - initiatives that began with the BBC collaboration, 'Diversity and Inclusion in Composition Conference' (2016) and include the College-wide project 'Underrepresented music' (2020).

Revalidation of the College's undergraduate and taught postgraduate programmes in 2016 and 2021 has provided the opportunity to realise the strategic aim of ensuring that new curriculum developments are informed by recent, evidence-based research. Research-led teaching has been strengthened in all areas through the introduction of a suite of 'research electives' and small-group tutorials to develop critical research skills, the appointment of a Head of Music Education and the first lecturer in Musicians' Health and Wellbeing in a UK conservatoire. The research expertise of Dr Henley (Director of Programmes), appointed in 2019, further embeds research in curriculum design, focusing on the key strands of Music Education, Health and Wellbeing, Entrepreneurship and Performance by addressing issues of inclusivity in a programme that integrates academic, performance and professional training activities. Research pathways in music education, music psychology and musicology introduced in the 2021 revalidation of the undergraduate curriculum enable undergraduate students to benefit from research expertise alongside their Principal Study, aligning with the Postgraduate Taught (PGT) programme which, since 2019, has permitted students to opt for a second specialism in artistic research, musicology, music psychology, music education or PRiSM collaborative approaches, facilitating the progression of students from undergraduate to eventual doctoral study.

Research has benefited significantly through collaboration with the College Archives and Collection of Historic Instruments (CHI), for example 'Making Music in Manchester', which received AHRC funding from the Everyday Lives in War WW1 Engagement Centre (2016). This project involved community partners the Hallé Concerts Society and Manchester Central Library, as well as project volunteers. This led to the uncovering of new knowledge about the lives of Manchester musicians during and immediately after the Great War, exhibitions and numerous concerts at the RNCM and elsewhere. The archivist received National Heritage Lottery Funding (NHLF) for two follow-on projects and a National Archives network grant to digitise key collections within the city and bring the project and the documents to 'hard-to-reach' communities and groups. The CHI has been digitised through the MINIM-UK project, enhancing

its visibility. Over the REF period, five doctoral students have worked in the Archives and several staff researchers have used them and CHI as the basis of their research. Professor Beckles-Willson (Honorary Research Professor) is developing a major bid with colleagues based on the CHI and Peter Sheppard Skaerved (RAM) used the RNCM Stradivarius to perform and record the Klagenfurt Manuscript (c.1685) on the Athene label. The Archives have received £62,800 funding from the NHLF for the Northern School of Music centenary and are developing a College-wide project for the RNCM's fiftieth anniversary.

Within its Strategic Plan, the College has the ambition to gain its own Research Degree Awarding Powers, which requires the College to have achieved 30 doctoral completions. RNCM is on the point of achieving this, with 24 completions by 31 July 2020 and 29 by the REF submission date. It plans to submit an application to the Office for Students mid-late 2021. RDAP will enable RNCM to offer new Level 8 programmes including an EdD and an Artist Diploma, which are likely to attract a wide range of applicants, in addition to the traditional doctoral programmes.

### **Research and Knowledge Exchange Strategy 2021-25**

The Research and Knowledge Exchange Strategy (2021-25), which encompasses the strategic priorities of the RNCM 2020-2025 institutional strategy, will be implemented in September 2021. It will provide a roadmap for the next stage of research and knowledge exchange development at the RNCM and draw on the College's world-leading specialist, applied and inter-disciplinary research to inform the future evolution of music and the music profession. The strategy outlines a number of goals:

- Increase the FTE of colleagues engaged in research and the doctoral programme by a further 25%. This will be achieved through peer mentoring, staff training and development, involving more performance staff in practice-as-research supervisory teams, working as research representatives within the Schools of Study and encouraging staff to undertake research degrees.
- Ensure that all aspects of the curriculum at undergraduate and taught postgraduate level are informed by current research.
- Continue the inclusive policy of supporting all areas of research excellence in the College, while developing a number of priority areas: music education, digitisation, audience research, interdisciplinary research, and health and wellbeing. RNCM already has research leads and teams in these areas and will look to increase capacity through targeted grant applications, often including collaboration with partners, support from donors and the creation of PhD studentships and postdocs. The College's Research Centres will continue to be developed, most of which have been established during the current REF period and have attracted external funding (PRiSM, Centre for Music Performance Research, and Centre for Music and Conflict).
- Building on the StART Entrepreneurship Project (funded by the Office of Students, OfS), we will develop expertise in embedding entrepreneurship in the curriculum.
- Drawing on College curriculum strengths, Popular Music research will be a growth area in the new strategy.
- One of the three pillars of RNCM 2020-2025 institutional strategy is 'Society'. An Institute for Music and Social Impact will be launched to coordinate research, education, performance and engagement work in relation to climate and the environment, and EDI – both priority areas for activity and research at the College. This will draw expertise together to address challenges and identify sources of funding, working closely with Manchester HEIs and regional, national and international partners.
- REF 2014 confirmed the ability of RNCM's research to engage publics and have an impact on policy and society. The College will find new ways of engaging the wider public in its research, utilising the access it has to the public as a performance venue. Recent advances in digitisation and audience research in the College will extend its reach in collaboration with RNCM Performance and Programming and RNCM Engage (winner of 2020 THE Access and Participation award). All RNCM-funded research projects are required to outline a dissemination and impact plan.

## 2. People

### Staffing strategy and staff development

In the 2015 Research Strategy, the College made the commitment that all new appointments to FTE posts and new hourly paid academic and instrumental tutor positions should normally have a record of research or the potential to contribute to research assessment exercises. This has resulted in a number of appointments with an established or emerging research profile, for example, Kelly, Reyland, Clarke and Forkert (Musicology); Babington and Swayne (Performance-Musicology), Pauly, Daverson and Salem (Composition); Bowler, Whiteman, Haines and Wayte (Composition-Performance); Ascenso (Psychology) and Habron and Henley (Education). There is a marked increase in the number of colleagues with significant responsibility for research, from 15 in 2014 to 28 in 2021. While Music Education is new, other disciplinary areas have either remained stable or have increased in capacity.

The College is also committed to developing the research potential of existing staff through a number of focused interventions including peer-mentoring of mainly performance and early career (ECR) staff, PGR fee-waivers for staff, research training (publishing, grant applications, ethics), sub-disciplinary reading groups, research-focussed staff training and a range of Festivals and conferences in which practice and research are brought together e.g. New Music North West (2016, 2017, 2019), Decontamination (2014-20), HARP's inaugural conference (2018) and Musical Women in Europe in the Long Nineteenth Century (2020). The College is extending its research reach and is currently mentoring colleagues in Schools of Study, which has resulted in staff receiving internal research grants, applying for external funding and preparing publications. In addition to the staff who are undertaking PhDs at the RNCM, six colleagues have gained PhDs from other institutions or are nearing completion.

The Research Department administers the Research Grant fund. As a result of an increase in QR funding following REF 2014, funding to Research increased by 10% on an annual basis for four years. An additional £20k was established for strategic projects to support part-time hourly paid staff to have dedicated research time, fee-waivers for staff undertaking PhDs at the RNCM and to facilitate the Research Leave scheme. The fund has supported research projects including recordings, practice-as-research workshops and impact activities; the funding criteria has been adapted to take fuller account of performance-as-research. Over the REF period, 79 awards were made to practice researchers, amounting to £63,600, supporting staff preparing for REF as well as staff beginning to engage in research. Staff with significant responsibility for research have a Personal Research Allowance of £500 (pro rata) to support research activities.

Members of staff engaged in research have an annual Research Activity Review with the Director of Research to discuss their Personal Research Plans, including identifying potential collaborations, funding opportunities and setting goals. All staff on academic contracts are allocated five weeks a year for scholarship time, which can be used for research. Those with significant responsibility for research receive 20% of research time in their workloads and others who have emerging research profiles, 10%. These allocations are reviewed on an annual basis.

The College's Research Allocation Policy enables colleagues to undertake significant research without requiring external funding. Seven members of staff have benefitted from the updated, more inclusive, policy; it has facilitated the completion of an opera (Gorb), monographs (Duncan, F. Fitch) and high quality articles and chapters (Ginsborg, Habron, Kelly). It has also supported colleagues returning from maternity leave, an important EDI issue. There have been a number of promotions of colleagues in recognition of their significant contribution to research and the REF including Professors Howard, Horne, Reyland and Doctors Goves, Phillips, Duncan and Bowler.

### Evidence of the training and supervision of PGR students

RNCM introduced a postgraduate research degrees (PGR) programme, validated by Manchester Metropolitan University (Man Met) in 2008–9 and has been part of the North West Consortium Doctoral Training Partnership (NWCDTP) since its formation in 2014 alongside the



Universities of Manchester, Liverpool, Lancaster, Keele, Salford and Manchester Metropolitan. It was one of only three conservatoires to be part of a DTP in the first round of funding and has been successful in gaining an average of two studentships a year within the music pathway (15 awards, 2014-20). A number of senior College staff serve on the Strategy Board, the Management Group, Training, Employability and Knowledge Exchange (TEKE) panel and Music pathway panel. The College has demonstrated its commitment to PGR by investing in RNCM studentships, fee waivers and match-funding AHRC studentships in the second DTP.

At the time of REF 2014, the College had only secured two PhD completions. By 31 July 2020 this had increased to 24 (7 composition, 5 music psychology, 5 musicology, 5 performance and 2 music education), many of them funded by various AHRC schemes (7), RNCM studentships (4) and staff fee-waivers. Since July 2020, there have been five further completions (2 AHRC; 1 RNCM), bringing the total to 29 by the REF submission date. Five more completions are expected by August 2021. A substantial portion of the College's current research students are funded by AHRC schemes (7), RNCM studentships (5), or staff fee-waivers (3). The success in gaining external studentships, combined with RNCM investment in the PGR programme, has greatly contributed to developing its capacity and attractiveness; students are drawn to the exceptional opportunities for creative collaboration, public engagement, dynamic performance environment, and supervision by professional musicians who are also scholars. The College is reviewing its admissions and studentship policies to ensure a diverse and inclusive approach to the selection and admission of students.

Studying within a conservatoire setting affords students the unique opportunity to showcase their own work in public events, and to learn from presentations, workshops and lectures given by world-class musicians who visit the RNCM to teach and perform. Composer festivals and the RNCM's New Music North West Festival, feature leading composers-in-residence and include public performances by student composers, as well as staff. Other opportunities for career development are offered through the College's Professional Engagements and professional experience schemes.

In terms of external recognition, the College's research students have helped to organise and presented at high-profile international conferences, for example Musical Women in Europe in the Long Nineteenth Century (2020), NWCDTP Annual Conference (2016) and the Royal Musical Association Annual Conference (2019). Current and former students have published their research with prestigious publishers such as Bärenreiter, *Frontiers in Psychology*, *Musicae Scientiae*, *International Journal of Music Education*, *British Journal of Psychiatry International*, *Psychology of Music*, *Music Education Research*, *Early Music* and *Music and Letters* and received commissions (e.g., Glyndebourne Opera, Barbican, BBC Phil, LSO, Psappha, Riot Ensemble, Liverpool Phil, CoMA, Access Contemporary Music Chicago). They have gained or been nominated for prestigious awards (e.g., musical score for Best Short Film, Oscars 2018; Ivors Academy, 2020) and prizes (New Zealand Musicological Society, 2018), selected for the Roche Continents residencies (2017 and 2018), Darmstadt (2018) and awarded a Library of Congress Kluge Fellowship (2015). Former research students have developed significant careers as award-winning composers, performers, teachers, researchers and lecturers, some of whom now hold permanent positions at Bath and Birkbeck Universities, the University of York, Jinan University in Guangzhou, China, Leeds College of Music and Trinity-Laban Conservatoire of Music and Dance.

### **Training and supervision**

Students undergo a comprehensive induction programme at both RNCM and Manchester Metropolitan University, including a training needs analysis. Generic research training being based on the Vitae Researcher Development Framework (RDF). At RNCM, regular workshops are offered to support students through the key milestones of their research degree including progress reviews, preparation for PhD submission, research ethics, writing, publishing and career development. Through Manchester Metropolitan University, students have access to a range of workshops and training events, and all doctoral students have the opportunity to benefit from NWCDTP training, events and placements.

Discipline-specific research training is provided by RNCM, with weekly seminars in four pathways: Research Methods in Artistic Research (music composition and performance), Music Education, Music Psychology and Musicology. Composition students also attend weekly composition seminars. PhD students in performance are members of the appropriate School of Study (and attend all relevant performance classes and masterclasses). Research students attend weekly Doctoral Training Seminars and present their work-in-progress at the annual PGR conference, which is now facilitated by students, and forms part of their annual review. Most students are members of one or more of the RNCM Research Centres/Hubs and all receive group membership of the Royal Musical Association, being encouraged to participate in RMA training and annual postgraduate conferences. Some students join other societies such as the Society for Education and Music Psychology Research (SEMPRE) and the European Society for the Cognitive Sciences of Music (ESCOM). Students have the opportunity to teach, where appropriate, once appropriate training has been completed.

Each student has a Personal Research Allowance of £250 (pro rata) and can apply to the RNCM Research Fund for larger amounts to support their research. Over the REF period, 54 awards were made amounting to £23,000. NWCDTP students have access to funding for field work, research trips, equipment, training and conference organisation. Students can also apply to Manchester Metropolitan University for conference support.

The supervisory team is the pivotal point of support, mentoring and training for PhD students, with students being allocated a primary and a secondary supervisor. All supervisors are trained and supported in their role, including an annual half-day research supervision event. Those new to supervision are mentored by experienced colleagues. Each student has a Director of Studies (DoS) based at Man Met who is selected on the basis of their supervisory expertise. They are expected to contribute to supervision as appropriate but also to advise on general matters of academic process. Students receive 30 hours of supervision a year. Most supervisors are members of staff at RNCM, but where special expertise is needed, some secondary supervisors are recruited externally. Over the REF period, the doctoral student body has become a vital part of the College's research community, reflecting and shaping its expertise and enhancing its international profile.

### **Postdoctoral Researchers**

The RNCM has attracted a number of post-doctoral researchers on funded projects, including Dr Thomason, who was the Research Associate on the AHRC-funded Making Music in Manchester project (2016) and Dr Nicolas Southon who followed Kelly to the RNCM for the second year of a Marie Curie Fellowship in 2016-17. In 2017-18, Dr Rebecca Thumpston was Research Associate to Kelly to support her work on the AHRC project 'Accenting the Classics'. In 2019, Dr Ioanna Filippidi secured an AHRC (NWCDTP) postdoctoral award for the Musical Earworms Project with Dr Phillips; Dr Jessica Beck was funded by the NWCDTP for a collaborative project with the BBC Philharmonic on musical women at the BBC orchestras. Since 2019, Dr Christopher Melen has been a postdoctoral Research Software Engineer in PRiSM, funded by Research England. In 2019 Dr Keith Phillips took a postdoctoral role on the CEMPE project in collaboration with the Norwegian Academy of Music; he and Dr Nicola Pennill are postdoctoral researchers on the OfS-funded Entrepreneurship project. Most recently, Dr Diljeet Bhachu has been appointed as a postdoctoral fellow to undertake research in education and participation. All contribute significantly to the vibrancy of research at RNCM.

In 2017 Professor Denis Herlin was appointed to the International Chair in Musicology. As the world-leading Debussy scholar, his appointment coincided with preparations for the Debussy Centenary Conference at RNCM and University of Glasgow, where he gave the Michael Kennedy International Research Lecture. The appointment signalled the status of musicology at the RNCM alongside International Chairs in performance and composition. The College has a Visiting Research Fellow scheme, enabling researchers to visit RNCM to carry out projects in collaboration with RNCM colleagues. Recipients during the REF period included Associate Professor Lotte Latukefu (Sydney, 2015), Dr Catrina Flint (Montréal, 2017), Associate Professor

Bronwen Ackermann (Sydney, 2019) and Dr Susanna Cohen (Israel, 2020). In 2019 an Honorary Research Fellowship scheme was introduced to reflect significant, emerging or strategically important research relationships with the College. Recipients include Professor Peter Hill (Sheffield), writer Ben Kaye, Dr David Fligg, Professor Marcus du Sautoy (Oxford, PRiSM), Professor David de Roure (Oxford, PRiSM) and Professor Rachel Beckles Willson (SOAS). Many are involved in important collaborations, particularly within the RNCM's Research Centres.

### Equality and Diversity

The RNCM is committed to equality, diversity and inclusivity across all of its activities. All sub-disciplines of music are accorded equal importance at RNCM, including practice-as-research, musicology, music psychology, music education and community music; evidenced by a track record of research projects going beyond the canon, addressing overlooked composers and women in music. In the area of practice-as-research, RNCM is keen to encourage a diverse range of aesthetic approaches, blurring distinctions between classical, popular and improvised musics. The Research Department is taking positive action to diversify research further at the College, contributing to the *Underrepresented Project*, including diverse speakers and topics at the Sir John Manduell Research Forum series and the Michael Kennedy International Research Lecture, and in the appointment of an International Chair in Music Education, Nate Holder, to address access and inclusion more fully across the College. It has used Strategic Priority funding to support ethnic minority colleagues to undertake research projects on EDI topics with mentoring, which has led to a successful AHRC/BBC Fellowship to research and promote underrepresented composers. The College fully supports the NWCDTP decision to ringfence doctoral studentships for ethnic minority applicants.

The equality analysis of the REF submission shows a number of small differences between the overall staff population and staff included in REF 2021. Slightly more men than women have significant responsibility for research (17/11), whereas the ratio is more equal in the overall RNCM staff population. Although fewer women than men are submitted to the REF, a number of women have prominent leadership positions nationally and internationally (Kelly, Royal Musical Association (RMA) President; Ginsborg, past President of European Society for the Cognitive Sciences of Music (ESCOM); Phillips, Chair of MusicHE; Merrick, Principal, Chair of CUK); Henley, series editor, Routledge. However, an equality analysis of the selected outputs shows no difference between women and men in the number submitted. Only one person in the 25-34 age group has significant responsibility for research, which could reflect the time it takes to become an independent researcher and the fact that some practice-as-researchers start their research careers later. In other respects, the equality data are consistent with RNCM staff data.

### 3. Income, infrastructure and facilities

One of the aims of the 2015 Research Strategy was to substantially increase external research income as a means of improving the range and quality of research at the RNCM and place it in the best position to make a strong submission to the next REF. The RNCM set a number of targets for achieving a substantial increase in grant income. Taking the REF sector-level income targets of £7,144 of research income per Category A staff FTE per year, it aimed to reach a total income of between £375,060 and £535,800 over the five years of the plan. The College has exceeded this target for the years in question, reaching £882,000 over the five years and £1,430,000 between 2013 and 2020. **Table 1** shows the upward trajectory from £46,000 in 2013-14 to £502,000 in 2019-20. Funders include AHRC (UKRI), Research England, European Commission, British Academy, Colt Foundation and most recently, the OfS. Grants range from modest seed funding to major capacity building (Research England) and collaborative grants (AHRC and OfS). Particularly noteworthy was the successful application to Research England's E3 scheme to build capacity in pockets of demonstrable research excellence, which enabled RNCM to develop an interdisciplinary centre PRiSM, devoted to creative collaborations between practice-as-researchers and scientists. The centre has recruited Dr Sam Salem as a lecturer in composition and mixed media, a Research Software Engineer, Dr Christopher Melen, as well as a Centre Manager, Dr Sam Duffy. The funding has enabled the College to diversify its expertise

in digital and AI, attracting high-profile collaborations with industry partners, scientists and students to address major challenges. The HEFCE/OfS catalyst-funded Ensemble+ project (£2m) has enhanced the College's digital infrastructure and will enable it to develop research projects around digitisation with our international partners. The StART Entrepreneurship award brings together research, KE and the curriculum in distinctive ways. Income from AHRC PGR grants (discussed above) amounts to a total figure of £670,000.

Table 1 External Research Income during the REF period.

2013/14	£46,000
2014/15	£104,000
2015/16	£98,000
2016/17	£148,000
2017/18	£245,000
2018/19	£287,000
2019/20	£502,000
<b>Total</b>	<b>£1,430,000</b>

[This figure differs from the reported HESA data. The amount underreported is £23,000, which is within the 5% limit of variance.]

RNCM has also been involved in Performing the Jewish Archive (AHRC) as a project partner; RNCM academic tutor Dr Fligg, now an Honorary Research Fellow, was the project consultant, while student performers and composers were involved in performances at the British Library. Howard was Leverhulme Artist in Residence (Liverpool) while she was employed at the RNCM. This REF period has seen a significant culture change and a notable increase in the number of colleagues who are applying for grants. At the same time, many RNCM practice-as-researchers are successful in securing artistic funding from Arts Council England, the PRS Foundation, Vaughan Williams Trust and other arts funders and promoters amounting to over 1 million over the REF period.

### Infrastructure and facilities

The Research Department is led by the Director of Research, who is a member of the RNCM Executive. She is assisted by an Associate Director, who is course leader for the PGR programme, a Research Manager, who supports the financial and technical side of grants and assists with REF preparations, and a Research Administrator, who looks after the PGR programme and is secretary to the research-related committees. In 2018 RNCM appointed a Knowledge Exchange Manager to drive activity in this area across the College, including bids that involve non-HEI partners. RNCM has research leads for each sub-discipline to review PGR applications and mentor colleagues. Each School of Study has a representative who reports research activity to the Research and Knowledge Exchange Committee and acts as a champion for research within their School. Core research business is approved by the Research and Knowledge Exchange Committee (RKEC), which reports to Academic Board. RNCM has developed a number of discrete Research Centres over the REF period (section 1), which involve staff, students and external HEI and non-HEI partners. These centres have become important in galvanising research activity (see also Section 4). A focus for the RNCM research community is the Sir John Manduell Research Forum series in which external and RNCM researchers are invited to give weekly seminars. The community has remained strong since the pandemic with PGR and Research Forum seminars taking place online and a buddying system to support PGR starters. In 2016 the annual Michael Kennedy International Research Lecture was inaugurated as a spotlight event for international researchers, often involving students from across the College. Speakers to date are Annegret Fauser (2016), Denis Herlin (2018), Michael Klein (2019), Rachel Beckles Willson (2020) and Memo Akten (2021).

Research facilities include a dedicated and equipped PGR room where students can hot-desk. Composition staff and students have access to a Composition Suite, giving composers access to



up-to-date computers and relevant notation and audio software and hardware. Staff and doctoral students involved with PRISM have access to specialist computing facilities including two Deep Learning computers funded by Research England, and the in-house expertise of the Research Software Engineer for research in music and computing, machine learning and composition. programming, AI and animation. The HEFCE/OfS-funded Ensemble+ studio has a Meyer Constellation System, an adaptive acoustic environment currently unique within UK HEIs. providing facilities for advanced audio technology, acoustics, virtual reality, technologically mediated distance learning and music making, and high-fidelity flexible audio surround sound.

Research benefits from the professional infrastructure that comes with an Arts Centre, particularly for the performance and creation of music, is an important attraction for both staff and doctoral students. This includes the Concert Hall, Opera Theatre, and Recital Room. Researchers also have access to the flexible studio spaces of Studio 6, 7 and the lecture theatre, which have high quality screens and audio and computer connectivity through. The College has recently invested in flexible Zoom rooms and bespoke spaces for distance learning and research, as well as mobile Zoom facilities and specialist low-latency point-to-point distance communication systems designed through the Ensemble+ Research & Development process and optimised for music. Meeting and social spaces have enhanced conferences and directly contribute to a lively and well-connected research community.

### **Library, Archives and CHI**

The RNCM Library, which has a dedicated Research Librarian, provides a specialist, bespoke service for the research needs of staff and students. Since 2014, it has received three IAML (UK & Ireland) Excellence Awards, most recently with distinction. It holds important collections of music from Sir Charles Groves, Evelyn Rothwell/Barbirolli, Jascha Horenstein and William Glock, and now owns the Fuller-Maitland collection, formerly on loan. It has recently expanded its online resources, including access to a greater selection of journals and NKoda (digital sheet music). The Library's e-Learning Co-ordinator has established an RNCM Research Repository, which is currently for journal articles and conference proceedings, but will soon include other text-based and practice-as-research outputs.

The RNCM Archives contain the papers of individuals with significant RNCM connections including Adolph Brodsky, Carl Fuchs, John Ogdon, Philip Jones and Elizabeth Harwood; correspondence from Grieg, Elgar, Hallé, Tchaikovsky; and substantial collections of manuscript scores by Alan Rawsthorne, John Golland, Arnold Cooke, David Ellis, Richard Hall and others. Over the past five years the Archives have developed to be more inclusive of Manchester communities through targeted heritage outreach projects. The papers of the RNCM and its predecessors give a fascinating and detailed account of Manchester's role in classical music training, performance and performers, both for the North West and nationally. A specialist Archivist curates these collections, advises researchers and works with community partners and volunteers to share them. Staff and students also have access to the John Rylands University Library with its rare book collections, early printed scores, and numerous manuscripts, and to the city's Henry Watson Music Library, which is a partner of the RNCM Archives. The CHI (an Accredited Museum) comprises some 300 instruments, including violins by Stradivarius, Broadwood pianos, a Barak Norman viol, and non-western instruments including an oud. Waterhouse's collection of historical bassoons is destined to be housed in the College as part of the Collection.

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

### **Research collaborations**

RNCM researchers have developed a range of notable research collaborations in six continents over the REF period, resulting in several funded projects and a wide range of published and creative outputs. Building on existing networks, RNCM has established influential collaborative projects with the Conservatoires UK (CUK) network, notably the AHRC-funded Musical Impact project (2013-2017), the results of which have had world-wide significance and reach. PRISM's novel interdisciplinary approach has engendered highly innovative research collaborations

across mathematics and science, including with climate change scientists, mathematical biologists, ophthalmic bioengineers and ecological geneticists, based at the universities of Liverpool, Oxford and Manchester Metropolitan. Independent Artists, Writers and Scientists in Residence at PRiSM collaborate with RNCM research students and staff. RNCM Music Psychology expertise has been recognised for its contribution, not only to research on musicians' health and wellbeing with collaborators in different parts of the world (including Israel and Australia), but to interdisciplinary research on hearing and the digitisation of instruments with University of Manchester, and audience research in collaboration with Manchester HEIs. RNCM is contributing internationally to the relatively new research field of music and entrepreneurship with Norwegian Academy, University of the Arts and Royal Central School of Speech and Drama. High profile international collaborations e.g. Eastman School of Music, University of Ottawa, North-West University (South Africa) have led to notable publications on key musical figures (e.g. Dalcroze, Lutoslawski and Ravel) and to topics of wider applicability, including music and embodiment, spirituality and virtuosity. Aesthetically diverse practice-as-research collaborations nationally and internationally (e.g. Huddersfield, Oxford and Toronto) are increasingly shaping this growing field of creative research, as the Research Centres, PRiSM, Exploratory/Experimental Music, HARP and Music and Conflict attest.

### **Wider Collaborations and Partnerships**

RNCM researchers have established collaborations with non-HEI partners, notably in the creative industries. Many practice-as-researchers direct, or are members of, a wide range of ensembles with which they co-produce their research. These include the Riot Ensemble (Swayne), House of Bedlam, Decontamination (Goves), Trio Atem (Whiteman), Apollo Quartet (Buckland), Ensemble 10/10 (Rundell), Distractfold (Salem, Pauly), the Wallace Collection (Miller) and the Pleyel Ensemble (Davies). In addition, colleagues work closely with ensembles, orchestras and festivals to disseminate their research, including Kreutzer Quartet (Merrick), Manchester Camerata (Bowler, Phillips); Psappha (Horne, Gorb, Goves), Ensemble recherche (Daverson), International Contemporary Ensemble (Pauly), Vortex Ensemble, Lausanne (Pauly), Ensemble Phace, Vienna (Pauly), Royal Liverpool Philharmonic Orchestra (Carpenter, Rundell), BBC Phil (Howard, Goves), London Symphony Orchestra (Howard, Goves), Barbican and Piatti Quartet (Howard), London Sinfonietta (Goves) and the Hallé (Phillips).

Furthermore, colleagues' research is curated and disseminated at prominent festivals, including Huddersfield Contemporary Music Festival (Bowler, Goves), Manchester International Festival (Howard), BBC Proms (Carpenter, Howard, Horne), Darmstadt (Daverson, Pauly, Salem), Chester (Rundell), Bendigo International Festival of Exploratory Music (BIFEM) Australia (Goves) and Borealis (Goves). While New Music North West (Rundell and all RNCM composers) has helped to make Manchester a leading centre for new music, these other festivals are crucial in reaching a range of audiences further afield. In these contexts, practice-as-research plays a vital role in shaping musical life on a regional, national and international level.

In addition to those cited above, RNCM researchers collaborate with a wide range of other organisations to co-produce research in each of the sub-disciplines, including London Music Masters, Negaunee Music Institute, Drake Music, British Association for Performing Arts Medicine (BAPAM), Irene Taylor Trust, Music in Detention, Good Vibrations, Making Music.org, Manchester Science Museum, Ethical Society, Association des Amis de Jaques-Dalcroze (AAJD), Federation des Enseignants de la Rythmique (FIER), the Fondation Emile Jaques-Dalcroze (FEJD), Musicians' Health Literacy Consortium, In Place of War, Hallé Concert Society and Manchester City Council.

### **Contributions to the Research Base**

RNCM's researchers have been elected to senior leadership roles of major learned societies and educational organisations, notably the Royal Musical Association (Kelly, first female President; Forkert, first ECR Council member), ESCOM (Ginsborg, President, 2012-2015), MusicHE (Phillips, Chair), Academia Europaea (Kelly, 2020), and the International Conference of Dalcroze Society (Habron, 2013). Furthermore, RNCM's co-direction of the Institute of Musical Research (IMR) from 2020 within a consortium of HEIs (Aberdeen, Guildhall, Kings College,

London) is further evidence of the College's prominence in leading and shaping research in music. The College leads networks such as Conservatoires UK (Merrick, Chair) and the International Benchmarking group, and plays an active role in the Association of European Conservatoires Network and Healthy Conservatoires network, which provide opportunities for fruitful collaborations. Recognition of research contributions is evident from high-profile visiting Fellowships/Professorships at Sorbonne University and Keele (Kelly), Liverpool and Oxford University (Howard); North-West University, South Africa (Habron) and London Goldsmiths (Bowler). Composers are successful in securing prestigious residencies, for instance at Aldeburgh (Goves, Howard, Gorb, Carpenter), Internationales Künstlerhaus Villa Concordia (Daverson), Daejeng University, South Korea (Gorb) and Harvard and Civitella Ranieri Foundation (Pauly).

RNCM colleagues made a recognised contribution through keynote lectures in Princeton and Montréal (Kelly), IMR, London (Reyland), University of Western Sydney, the Federal University Goiás (Brazil), University of Ghent, Karol Szymanowski Academy of Music, University of Karlsruhe, Central Conservatory of Music, Beijing, University of Belgrade and Estonian Academy of Music and Theatre, Tallinn (Ginsborg), and Queensland Conservatorium (Bowler). Colleagues have received awards and prizes for their creative research outputs, for example the British Composers Award, 2017 (Howard) and the Inaugural Ensemble Ernst von Siemens Foundation Prize, 2020 (Swayne, Riot Ensemble). Furthermore, RNCM composers sit on prestigious award committees, including Ivors Academy, notably Carpenter and Gorb.

Colleagues are involved in research journals in a variety of roles: Ginsborg was Managing Editor of *Music Performance Research* until 2019 and is now Editor-in-Chief of *Musicae Scientiae* (2019-). Many participate in editorial boards and peer-review panels for a wide range of international journals: *International Journal of Community Music*, *British Journal of Music Education* and *Music Education Research*, *Research Studies in Music Education* (Henley); *Twentieth-Century Music*, *Journal of the Royal Musical Association*, *Revue de musicologie*, *Journal of the Society for Musicology in Ireland*, *Transposition* (Kelly); *Music Analysis* (Reyland), *International Journal of Music Education* (Habron). Henley is editor of the ISME-Routledge Book Series. Research staff review for all major music journals and publishers and act as external examiners for PhDs and higher doctorates in the UK and worldwide. Kelly, Ginsborg and Howard make valuable contributions by serving on the AHRC Peer-Review College (strategic, academic and international).

RNCM has hosted a number of high profile research conferences during the current REF period including ESCOM (2015), 'Creative Humanities: Thinking, Making and Meaning' NWCDTP (2016); NWCDTP-funded Musicians' and Wellbeing: Research and Policy (2016); Music, Nationalism and Transnationalism: Diplomacy, Politics, Aesthetics, 1918-1945 (2016); French Musicians and the Conquest of North America: Musical Travels, Cultural Politics and Patronage (2017); Claude Debussy in 2018: A Centenary Celebration (2018); Hub for Artistic Research Performance (HARP) inaugural conference (2018); RMA Annual Conference with University of Manchester (2019), and Musical Women in the Long Nineteenth Century (2020). In addition, colleagues have organised international conferences elsewhere, notably in Vienna, Québec City, Katowice, Montréal, London, Paris and given numerous papers and lecture-recitals at conferences and seminars throughout the world.

### **Beneficiaries: Readerships and Audiences**

RNCM researchers publish in a range of leading journals and with major scholarly publishers, benefitting academic and musical readerships. Performance-as-research is published and disseminated on record labels, including RNCM Northern Records, dFolds, Nonclassical, Prima Facie, BMG, NMC, Métier, Coviello Classics, Chandos, Sony, Rubicon, HCR and Nimbus. RNCM compositions are promoted by a range of leading music publishers, including Edition Peters (Howard, Gorb), Boosey and Hawkes (Horne) Cadenza Music, Wise Music (Carpenter) Edition Gravis (Daverson), AwayDay, G&M Publications, Bim Publications and ABRSM (Gorb).

As a conservatoire with an Arts Centre, RNCM is well placed to enable its research to reach audiences beyond academia. Research projects inform RNCM concerts and Festivals and attract a wide range of audiences. RNCM's collaborations with creative industry partners enable researchers to reach a wider range of audiences, for example, BBC Philharmonic, Liverpool Philharmonic, Barbican, Manchester International Festival (MIF), Birmingham Contemporary Music Group and London Symphony Orchestra. Furthermore, Rundell's research is disseminated through high profile international tours with Brad Mehldau, while Gorb's works are performed at leading American Universities, including the Eastman School of Music, Yale University and Cornell.

RNCM researchers also disseminate their research through the media. Research-active composers' and performers' works and performances are regularly broadcast and discussed on the BBC, while musicologists and music psychologists also share their research findings on BBC Radio 3 and 4, World Service and Classic FM and international stations (e.g. Russia-Kultura TV and Radio France). Their research has featured in magazines, such as *Classical Music*, *American Music Teacher* and *BBC Music Magazine* and in the broadsheet press. RNCM Radio was established as a means to disseminate performances and research during the pandemic; this work continues with livestreaming. Research is also shared via online platforms such as the Paris-Manchester Exhibition, software via the open-source platform GitHub (PRiSM), online archival resources, blogs and social media.

### **Impacts on Creativity, Culture and Society**

RNCM research plays a leading role in shaping the creative sector in the UK and abroad. Its numerous collaborations with the cultural industry have led to the co-production of new music in a range of genres (classical, jazz, wind ensembles, pop, mixed-media), which has reached audiences world-wide from large-scale concert-halls, and international Festivals to more specialist venues. Its impact is evident in shaping mainstream concert life, developing new genres and audiences and integrating new technologies and media. RNCM Digital outputs including software such as PRiSM SampleRNN, PRiSM Oscillator and the PRiSM Perception App provide access and engagement to new groups of creative practitioners and audiences. RNCM's substantial body of creative research has had a demonstrable impact on audience development within cultural and media organisations (e.g. BBC, MIF, Barbican, Imperial War Museum North) and on individual creative practitioners and scientists (PRiSM). RNCM practice-as-research also informs learning and participation, contributing to shaping new generations of both professional and amateur musicians through summer schools (Goves, Horne) and inclusive initiatives such as CoMA (Swayne), Adopt a Composer (Horne) and ConductIT (Heron).

### **Impacts on the public understanding**

RNCM's research expertise has had an impact on public, regional, national and international understanding of the past. Co-creation of new knowledge about the Great War, the Peterloo Massacre and the Holocaust has influenced regional, national and international civic commemorations, involving marginalised and under-engaged groups, with the support of National Lottery Heritage Funding. This has led to new forms of artistic collaboration and expression with a wide international reach (e.g. the Paris-Manchester project). More broadly, RNCM musicological research has changed understanding of the musical past and informed concert programming, Festivals and media organisations, notably Reyland with Radio 3 'Composer of the week' and BBC Proms appearances discussing Lutoslawski.

RNCM researchers have a track record of using music to communicate major societal issues and challenges, notably, Gorb's opera, *Anja 17*, which won a Parliamentary Award and contributed to change in the law on modern slavery (2015). Building on this work, Bowler's *Laura Sings* project has used creative means to draw attention to rape in partnership with Rape Crisis; a project which engaged universities and schools. Working with Manchester Camerata, Bowler has addressed the climate emergency in her multi-media work *Antarctica*, which was featured on BBC World Service, BBC1 News NorthWest and Radio 3 and led to the development of education resources for primary schools. PRiSM's interdisciplinary project 'Changing Music in a Changing Climate' (Oct 2020) is a further instance of the RNCM's ongoing commitment to



music's role in addressing this emergency. Swayne's *Speak to Me, New Music, New Politics* has addressed issues in contemporary politics; it has demonstrated an impact not only on new music audiences but the wider public, as Radio 3 and *BBC Magazine*'s 'Monthly Choice' features indicate. RNCM researchers have responded to the COVID-19 crisis through new 'lockdown' compositions (Horne, Goves), a music psychology study on the pandemic's impact on musicians (Ginsborg, Cohen) and an emerging collaboration with BBC Philharmonic and Fodens Brass Band on performance during COVID (Reyland, Ginsborg). This body of research has also had demonstrable impact on public, civic and community understanding, contributing to debates, shifting attitudes and giving rise to new forms of commemoration and participation.

### **Impacts on Health and Wellbeing**

Research at RNCM has had a significant impact on musicians' health and wellbeing. The AHRC Musical Impact project has led to the formation of the Healthy Conservatoires Network; the research recommendations have been implemented in conservatoires across Europe, influenced approaches to teaching across the sector and informed organisations such as BAPAM.

Ginsborg's collaboration with the Musicians' Health Literacy Consortium (funded by Worldwide Universities Network, 2018-2019), has led to the development of a tool for assessing musicians' health literacy specifically in relation to healthy practice and performance. This, and her collaboration with Universities of Manchester and Connecticut on 'hidden' hearing loss in musicians, (Colt Foundation, 2016-2019), has informed approaches to teaching across the sector internationally. RNCM's Lecturer in Musicians' Health and Wellbeing (Ascenso), has informed the wellbeing strategies of the National Children's Orchestra and Liverpool Philharmonic, and well-being initiatives at Welsh National Opera, Chetham's and BBC Philharmonic; she worked with Help Musicians to shape the charity's policy around mental health provision, and participated in a Think Tank event at Snape Maltings on Musicians' Resilience. Findings from her wellbeing promotion research have reached wider audiences through contributions to *The Financial Times*, *Music Teacher Magazine*, *Classical Music Magazine*, and *The Strad*; and she shared her findings at the Leaders Meet Wellbeing event with elite performance professionals from Olympic committees, aviation and the army.

RNCM is recognised for the public engagement of its research and other activities. It recently won a Times Higher Education (THE) Award (2020) for Widening Participation and Outreach Initiative of the Year for the Engage programme. It is also in the top 10% of the KEF Arts cluster for Public and Community Engagement. It is therefore in a leading position to continue to develop its Impact strategy to address societal challenges, including access and inclusion, and regional and cultural regeneration.