

**Institution: Royal College of Music**

**Unit of Assessment: 33**

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

The RCM is an institution wholly dedicated to the creation and critical investigation of music. Its international profile and integration with the music industry shape its research culture. Research is a strategic priority of the College and is supported by high levels of internal resource. Since REF2014, RCM research has attracted significant increases in external funding; expanded existing and introduced new areas of research through strategic recruitment; enhanced equality and diversity; nurtured an increased cohort of early career researchers; and supported growth and diversification in postgraduate research programmes. The RCM's research and its impact has become increasingly visible and influential across diverse scholarly communities, in locations and applications beyond academia, and within the institution itself. Recent significant capital investment in physical and digital infrastructure will provide an optimal environment for diversifying and disseminating future research, and enhancement of its impact in the wider world. This submission summarises these achievements and explains our strategy for research up to 2027.

Research at the RCM covers a broad range of disciplines and methodologies that investigate music's contemporary and historical creation, practice, and social impact on those who participate in it. The main areas of activity are:

- practice-based artistic research in composition and performance
- historical musicology since c.1500
- performance science, including the role of music in physical and mental well-being, and technological approaches to elite performance
- music education in both institutional and community settings.

Researchers in each of these areas benefit from the myriad synergies afforded by an institution focussed on collaborative musical practice. Our strategy supports an open research culture that stimulates innovative thinking and cooperation across disciplinary boundaries. The Centre for Performance Science (CPS) is the only discrete research centre, because of its formal partnership with Imperial College London (ICL); nevertheless, CPS researchers are closely involved in collaborations involving the other discipline areas. Monthly meetings of the Musicology Forum, three-weekly meetings of CPS, and weekly Composers' Seminars, each open to all researchers, stimulate cross-disciplinary and collaborative projects. Since REF2014 these initiatives have helped establish a strong, holistic, and cooperative institutional research ethos, responsive to the changing landscape of the music profession and its wider impact in society.

### **Research Strategy**

RCM Research is led by the Director of Research (DoR), a member of the College's senior management team who chairs the Research Committee (RC) made up of staff and doctoral student representatives drawn from each discipline area; it oversees the development and fulfilment of the RCM Research Strategy (RS) and monitors good practice in research. Headline aims for RS2014–20 and RS2020–27, are (1) 'to ensure an environment that supports the development of all RCM staff to engage in enquiry leading to the creation of new knowledge', and (2) 'substantially raise the RCM's national and international research profile'. The principal approach to achieving (2) has been a combination of new appointments in existing and new areas of research specialisms, and a focus on fostering a wide range of individual and collaborative projects involving RCM staff, researchers in other HEIs and public sector partners. These two strategic aims have fuelled a rapid increase in research activity and dramatic growth in the value of external funding from the £467,000 reported at the last REF to c.£3.7m in the period 2014–20. An RCM research office has been created to manage all aspects of the research endeavour including funding, monitoring and impact (see Section 3).

## Achievement of strategic aims for research and impact and planning for the future

### Performance Science

In the REF submission period 2008–13, the CPS was the RCM's principal focus for funded and collaborative research. Since its establishment in 2001 it has consolidated both an international reputation and a close-knit team of specialists who often work together on major projects. Its main institutional partner is ICL, and in 2017 a new joint RCM/ICL [Centre for Performance Science](#) was created to magnify its scholarly and impact heft in comparative aspects of elite performance training in music, medicine, business and sport, and to undertake large-scale studies of the impact of the performing arts on public health.

Major new funded research in CPS during the submission period includes [Musical Impact](#) (AHRC 2014–18). This joint project, led by RCM, with all nine of the UK's music and dance conservatoires (CUK) in partnership with the Association of British Orchestras, Musicians' Union, British Association for Performing Arts Medicine (BAPAM), and International Health Humanities Network, is the largest undertaking to date to investigate the physical and mental demands of making music, with the aim of enhancing musicians' health and wellbeing. The project's impact includes the setting up in 2015 of [Healthy Conservatoires](#), an international network that now includes over 50 conservatoires, schools and universities around the world; and an AHRC follow-on award for [Healthy Performer](#) (2019–20) to develop the impact of the research by promoting knowledge and good practice in the performing arts, extending the original project beyond music to include dance, drama, physical theatre and circus arts. *Musical Impact* became the catalyst for CPS's next large-scale project, [HEartS: Health, Economic, and Social Impact of the Arts](#) (AHRC 2018–20; UKRI COVID-19 Allocation, 2020–21). *HEartS* has a multi-disciplinary research team drawn from the RCM, ICL's Faculty of Medicine and Public Health, and its Business School, working together with the National Health Services and Arts Councils of the UK's four countries, and numerous industry partners, to investigate the impact of arts and culture on the health and wellbeing of the general population, from individual, social, and economic perspectives. With the support of funding from QR-GCRF and Strategic Priority Fund, *HEartS* research and impact strategy has been extended to China, in partnership with the Shanghai Conservatory, and to Canada, with McGill University.

During the submission period, CPS researchers have also conducted a range of other projects, most in collaboration with healthcare providers and charities. In different ways they have investigated the health and well-being impact of musical participation on:

- post-natal depression ([Music and Motherhood](#), Arts Council England, 2015–17), which tested the effects of regular group singing on mothers with new babies
- the mental health of cancer patients ([Sing with Us](#), Tenovus Cancer Care, 2016–18)
- [Loneliness and Mental Health](#) (UKRI Mental Health Network, 2018–22)
- live musical performance in maternity hospital settings ([ProMiMic: Professional Excellence in Meaningful Music in Healthcare](#), Dutch Research Council, 2019–23), taking RCM student musicians into ICL maternity units and investigating the impact on mothers' well-being
- facilitating bonding of families and babies affected by the ZIKA virus in Brazil ([ZikMus](#), British Academy and GCRF, 2019–21).

Another area of the Centre's work focusses on the application of psychology and technology to analysing and enhancing musical performance and pedagogy. For example, CPS was the principal musical partner in [TELMi: Technology Enhanced Learning of Musical Instrument Performance](#) (EU Horizon 2020, 2016–19), developing a pedagogical framework that embraces both traditional methods of violin instruction and research on how people gain expertise and learn skills efficiently and effectively. It involved innovations in audio, video, and motion-capture systems developed by the project partners at Pompeu Fabra University, Barcelona and the University of Genoa. Its industry partner, HighSkillz, is using its expertise in digital learning platforms and gamification to develop an

intuitive user-interface both to guide and motivate beginners and provide high-level feedback to experts, while incorporating a social learning system that helps musicians learn from their peers.

Linking primary research to industrial impact through engineering is an important new development and will be a key feature of future CPS research strategy. RCM is a partner in the ICL-led [MedTech Super Connector](#) (Research England, 2018–21), an incubator for ECRs and graduate students to translate and accelerate technical discoveries from academic labs into start-up companies, proposing new solutions to contemporary health challenges. The RCM has so far secured four fellowships under this scheme, and two fellows are already in the process of turning research prototypes into viable business spinouts. ECR George Waddell developed a business model for ‘MasterStudio’, an app. that facilitates online group music tuition, arising out of his work on *TELMi*. Ben Storey, Assistant Head of RCM Junior Programmes, is developing a device to help young patients with severe respiratory problems to clear mucus and exercise lungs, whilst also measuring expiratory lung pressures, flow and performance. The prototype will be trialled at Great Ormond Street Hospital.

### Musicology and Practice-based Research

The RCM’s traditional strengths in source studies and historical performance have been broadened and strengthened since 2014 in three distinct, but related fields:

- cultural and material history
- practice-based performance research
- music education.

**Historical musicology** at RCM embraces a wide range of performance-led research topics from c.1500 onwards, with a particular emphasis on the 19th and 20th centuries. It comprises the well-developed research interests of six senior scholars: Professor Trevor Herbert’s work on the cultural history of brass instruments and band culture; Professor Richard Langham-Smith’s work on 19th-century French music; David Wright, whose *The Royal College of Music: A Social and Artistic History* (2019) epitomises the recent ‘coming of age’ of cultural-historical musicology at the RCM; Professor Richard Wistreich’s co-edited *Cambridge History of Sixteenth-Century Music* (2019) similarly develops a social model of early modern music historiography. Wistreich also co-led the research network, *Voices and Texts* (AHRC, 2014–15), a multi-disciplinary investigation of the cultural history of speaking and singing from 1500–1800, concluding with an international conference, edited essay collection in the *Huntington Library Quarterly* (2019), and several journal articles and book chapters. Professor Gabriele Rossi Rognoni has expanded traditional musical instrument studies (organology) to develop a broader object-based approach to the material history of music, resulting in new museum displays and exhibitions delivered nationally and internationally, and publications and doctoral projects in collaboration with institutions in Europe, Asia and the USA. Finally, Professor Colin Lawson’s continued research into the history of performance has resulted in the co-edited *Cambridge Encyclopedia of Historical Performance Practice* (2018, winner of the IAML C. B. Oldman Award 2019 for ‘an outstanding work of music reference’) to which 17 RCM research staff contributed a total of 125 entries covering performance, organology, biography, music psychology and institutional history, exemplifying how the varied specialisms of many RCM researchers coalesce around the history and practice of musical performance.

In the current REF cycle, the RCM’s RS supported three of its mid-career musicology researchers to gain international status for their work. Professor Natasha Loges, whose work on Johannes Brahms since 2014 has produced the first comprehensive source study of *Brahms and his Poets* and two co-edited volumes of essay collections about the composer and his world, as well as journal articles and two further essay collections investigating the performance history of the German Lied, one arising out of the international conference ‘German Song Onstage’, held at RCM in 2016, and the other on *Musical Salon Culture in the Long Nineteenth Century*. Christina Guillaumier’s monograph on the operas of Sergei Prokofiev (2019), co-edited essay volume, *Rethinking Prokofiev* (OUP, 2020), and a new biography of the composer (in progress) underpin her appointment as Editor

in Chief of the new *Journal of Prokofiev Studies*. Wiebke Thormählen's work on music and emotions in the long 18th century has resulted in several journal articles and book chapters exploring aspects of musical practices, sensibility, and well-being. Her co-edited *Routledge Companion to Music, Mind, and Well-Being* brings together historical and scientific perspectives resulting from an international conference (2014) and includes chapters on neuroimmunology and on adult education by RCM researchers in CPS and music education. Thormählen's current research as Co-I for [Music, Home and Heritage](#) (MHH, AHRC, 2017–21) in collaboration with the University of Southampton, examines domestic music practices in Britain ca. 1750–1850, complementing Loges' interests in European salon culture and women's music-making. MHH collaborates beyond academia with The National Trust (NT), British Library, and Sydney Living Museums; outputs beside scholarly articles include an exhibition; audio and video sound curation materials for the NT (including recordings by RCM musicians); online databases of music books, musical instruments and other material objects in domestic collections; and a co-edited volume on sound heritage curation in house museums that stakes out a new theoretical field within museum studies (forthcoming 2021).

With [Music, Migration and Mobility: The Legacy of Migrant Musicians from Nazi Europe in Britain](#) (MMM, AHRC, 2019–22), the RCM leads an interdisciplinary, international collaboration with the Music and Migration Archive at the University of Salzburg and the Geography Department at Royal Holloway, University of London. It builds on two pilot projects led by its PI, Norbert Meyn: [Singing a Song in a Foreign Land](#) (EU Culture Fund; HLF: Rothschild Foundation, 2012–14), based on oral histories of musicians who fled Nazi Europe and settled in the UK, contextualised in a series of conferences and performance events and forming the nucleus of an online resource, already accessed more than 80.000 times; and a detailed study of one refugee musician, the composer and conductor [Peter Gellhorn](#) (AHRC Cultural Engagement Project, 2016). Combining practice-led and archival methodologies to enable a holistic investigation of a complex area of cultural history, MMM exemplifies research that is uniquely suited to the conservatoire environment. Planned outputs beside eight journal articles include public workshops, performances and studio recordings involving RCM students and professors of newly discovered and revived works; open-access editions of works by émigré composers; two public exhibitions (at Glyndebourne and London's Senate House Library); web-based resources for musicians, schools and HE students, including interactive story-maps and free-to-download music scores; and a three-day international conference.

The appointment of Rossi Rognoni as curator of the [RCM Museum](#) in 2014 has resulted in major developments in research into the material culture of musical instruments and performance practices, complementing the work of other historical performance musicologists, for example, Herbert (19c. and 20c. brass instruments and their culture); Professor Ashley Solomon (Baroque flute performance); Professor Terence Charlston (history and practice of keyboard instruments from the 16c. to the 18c.); Lawson (history of the clarinet); and Wistreich (vocal performance, 16c. to 19c.). This will be further consolidated with the opening in 2021 of the Wolfson Research Centre in Music and Material Culture, attached to the RCM's new interactive music museum. The RCM leads the consortium of museums which has created [MINIM-UK](#) (HEFCE [UKRI], 2015–17), a new digital union catalogue of that allows the public to find out about c.20,000 individual historical instruments held in more than 200 UK collections. The project included development of new online cataloguing standards and techniques subsequently adapted to provide training and research expertise to the Chinese Association of Music Museums (QR-GCRF, 2019–22), facilitating international access to musical instruments in museums across China and through international online aggregators such as Musical Instruments Online (MIMO).

## Practice-based Research

**Composition** Much of the composition research at RCM focusses on iterative collaborative processes between composers and performers, while several composers explore connections with visual art. For example, Simon Holt's *Joy Beast* (2016) explores the expressive potential of the basset clarinet in the hands of a virtuoso performer (and composer), Mark Simpson, with a large orchestra re-configured in reaction to the musical personality of the soloist, omitting violins and employing off-stage winds placed within the body of the audience. It references in its broader



narrative, visual stimulus from a lithograph by the artist Cecil Collins. William Mival's *Rond* was one of several new works (others by Cole and Kitos) for the new three-manual, 34-stop Flentrop organ commissioned by and installed at the RCM in 2017/18. A new instrument on this scale, manufactured to a unique specification, has provided a rare opportunity to rethink and challenge pre-conceptions about how composers and performers could work together in the making of new work for a 'traditional' instrument.

**Performance** While a substantial proportion of RCM research in historical musicology is 'performance-informed', inasmuch as most researchers are themselves performers, one group of musicians is engaged in solidly practice-based research. They include Charlston, whose research on the sources and performance practice of the clavichord and other early keyboards has produced 11 major CD recordings of 17th- and 18th-century music in the current cycle, including discs of music by J. S. Bach, Marin Mersenne, and Jacob Froberger, several coupled with editions of sources and/or journal articles. Solomon's research into 17th- and 18th-century flute repertoire includes investigations of the style-appropriate conditions for performing on surviving original flutes in the British Royal Collection and the hitherto entirely unexplored holdings of a private collector in Hamburg, that have not been played since the eras in which they were made. This hands-on investigative work complements the pianist, Danny Driver's research on 20c. performance practices (for example, Ligeti's piano music), and the record producer Stephen Johns' practice-based ethnographical research on acoustic studio recording.

**Music Education** The validation in 2017 of a new research master's programme in music education brought new members of research-active staff to the RCM, with expertise spanning community music (Jennie Henley, who left RCM in 2019, and Dave Camlin), early years music (Jessca Pitt), and other research interests ranging from the development of children's musical worlds to music education in 19th-century Ireland (Mary Stakelum). This new area links on one side with the various psychology-based music-educational interests of researchers in CPS (Williamon, Perkins, Spiro, Clark and Waddell) and on the other, with musicologists whose research includes the history of community and institutional music education (Herbert, Lawson, Roper, Thormählen, Wistreich and Wright).

Funded projects led by these new education staff have included a Research Network ([Excellence, Inclusion and Intervention in Music](#), AHRC, 2017–19) in collaboration with York St John University, led at RCM by Henley. It brought together an international group of scholars and practitioners working in community music to develop new concepts of 'excellence' and 'inclusivity' in music education in non-institutional settings. Camlin's work as a practising musician and leader of community choirs in the 'natural singing' movement underpins his research. Recent projects include [Fellowship of Hill and Wind and Sunshine](#), in collaboration with the University of York and the National Trust (AHRC, ACE, 2018–19), which won the National Trust Outstanding Achievement Award 2019 in their annual Culture Awards. Pitt, whose work centres on music in the development of the under-fives, is investigating music education for young children with special educational needs and disabilities, in partnership with Southampton City Council. Other projects in development include establishment at RCM of a network of researchers and practitioners in the field of Early Years Music Education, led by Pitt, with MERYC-England (Music Educators and Researchers of Young Children). A meeting at RCM in July 2019 established the urgent need to share research and practitioner expertise which can be directly used to inform and train education officers in public museums and art galleries about how to work effectively with the under-fives. Music education will play an increasingly important role in the next REF period, not least in the recruitment of doctoral students, of which there are already five. Camlin recently secured an AHRC CDA studentship (2020–24) in collaboration with the Natural Voice Network.

## Impact

Every research project supported by the RCM is required to have a coherent impact strategy, including active participation of potential beneficiaries in project design. The RCM maintains a database of impact evidence, including press and media coverage, and funding is provided to support the curation of short videos, hosting of web sites, and other impact resources. Prioritisation

of dissemination and impact of research includes the regular organisation of international conferences and other events that bring communities of practitioners and scholars into close and active contact, across all areas of RCM research interests. Since 2014, the RCM has hosted at least one large conference most years; they include: ‘Singing, Wellbeing and Health’ (CPS, 2014) together with the Institute for Public Health and the Sidney Hahn Centre; ‘Effects of Playing on Early and Modern Musical Instruments’ (2015), supported by the EU Agency for Collaboration in Science and Technology (COST) in collaboration with the International Committee of Museums and Collections of Instruments and Music of the International Council of Museums (ICOM-CIMCIM), providing a joint platform for conservators, instrument makers, performers and historians; ‘Listening to Music: People, Practices and Experiences’, jointly organised with the Open University as part of the collaborative project [Listening Experience Database](#) (AHRC, 2012–15); ‘Exile Estates, Archives, and Music Restitution’ (2015), supported by the International Institute for Suppressed Music, which grew out of the *Singing a Song in a Foreign Land* project and convened archivists, émigrés and holocaust historians from the UK, Austria and Germany; ‘German Song on Stage’ (2016), a collaboration with the German Historical Institute and Wigmore Hall, that included an experimental public reconstruction of a 19c. Lieder concert. Audience responses were collated, leading to a collaborative article by Loges (historical musicologist) and Terry Clark (CPS music psychologist) in the *Journal of Audience and Reception Studies* (2019), with the conference proceedings later published by Indiana UP. ‘Digital Resources for Musical Heritage’ (2018), organised as part of the *MINIM-UK* project (see above), brought together researchers in digital humanities and museum curators. The RCM also ran a series of study days centred on individual musicians, including ‘Carl Maria von Weber in London’, a collaboration with the Weber Gesellschaft and German Historical Institute (2016); the composer Edmund Rubbra, in collaboration with the Open University (2016); and ‘Hubert Parry: The Past, Present and Future of Music History Pedagogy’ (2019) with the University of Southampton. Each one featured research presentations with live music performed by RCM students and professors, making vivid links between history and contemporary practice.

The International Symposium on Performance Science (ISPS), established in 2007 by Professor Williamon, Head of CPS, is the leading forum for disseminating research in the field, attracting upwards of 300 delegates to its biennial meetings, co-convened by the RCM and host institutions around the globe. Meetings were held in Ryukoku University, Kyoto (2015), the Iceland Academy of Arts, Reykjavik, (2017) and the University of Melbourne (2019); the 2021 meeting is scheduled to be held at McGill University, Montreal. The RCM funds CPS staff, doctoral and master’s researchers to attend and present their work, and each meeting results in the publication of full conference proceedings, co-edited by Williamon. In 2021, the RCM will host two major conferences: the 12th International Conference for Research in Music Education (RiME), which is the pre-eminent forum for music education research in the English-speaking world; and the 60th International Conference of ICOM-CIMCIM, which aggregates music museum representatives from 55 countries. A joint conference for RCM composers in collaboration with the Association of Applied Mathematics is planned for 2022.

## Knowledge Exchange

In 2015 the RCM RC’s mandate was extended to include Knowledge Exchange (KE). An internal KE funding competition awards c.£10K annually to support selected projects that are keyed into impact capture. Wider sharing and dissemination of RCM research includes special events as part of the College’s public performance programme, for example, concerts featuring new works by RCM composers, and larger-scale events such as the three-day festival celebrating the work of Mark-Anthony Turnage in January 2020. There is a fortnightly public seminar series, ‘Music and Ideas’ presented by internal and visiting researchers that attracts a large and diverse audience. RCM research staff and students regularly mount projects at public engagement and data collection events in London, for example, at the annual Imperial College Science Festival, the V&A public lectures and exhibitions series, and pre-concert talks at venues including the Proms, Barbican, Southbank, Wigmore Hall and King’s Place. Many RCM researchers are highly visible in the international press and broadcast media.

## Future strategy for research and impact

The RCM's RS2020–27 was developed and agreed before the COVID-19 pandemic. While we have refocussed our plans in the light of the crisis, our principal goal remains: 'establishing the RCM as one of the world's leading centres for interdisciplinary research in music by 2030'. To achieve this ambitious long-term aim, the RCM has reiterated its fundamental commitment to maintaining investment in both staff and infrastructure for producing world-class research. The College recently completed a massive estate development, and a commensurate investment in digital infrastructure (see Section 3), which will enable it to amplify and broadcast to both local live and international online audiences. This, in turn, serves our increasing focus on research and knowledge exchange that explores the practice and effects of musical participation on, and within communities of participants beyond the confines of elite practice, extending from music-making with the under-fives (Pitt, Lisboa), adult community choirs (Camlin) and online music learners (Guillaumier, Williamon, Clark, Waddell), to patients and health-workers in care settings (Williamon, Perkins, Spiro, Lisboa, Waddell). The RS2020–27 commits to expanding the institution's traditional strengths in historical and source-based performance research by establishing a new Centre for Music and Material Culture (CMMC), around the new RCM Museum. By 2023 CMMC will include a newly established PhD studentship and a post-doctoral fellowship.

**Responses to Covid-19** The RCM responded to the pandemic at the start of lock-down by suspending projects that could not progress due to the nature of their methodologies, furloughing staff as appropriate, and restructuring or instigating no-cost extensions to others. Vulnerable staff whose research was impeded due to contracting Covid-19, childcare or shielding, were supported as necessary, with measures ranging from childcare cost support to reconfiguring timetables for outputs dependent on public performances or publishers' and recording companies' revised schedules. Funding from the UKRI COVID-19 Allocation awarded in July 2020 will be used to sustain extensions to some projects, and to reconfigure live public performance elements of *Music, Migration and Mobility* as webcasts and recordings.

Several research groups also instigated projects in direct response to Covid-19. The *HEartS* team moved quickly to set up a pilot online survey to track the pandemic's particular impact on professional performers, and this led to a major new project, [\*The Health, Economic and Social Impact of Covid-19 on Professionals in the Arts\*](#) (UKRI Covid-19 Research and Innovation open-call, 2020–22) to investigate the longer-term effects of the pandemic on the UK's artistic community in the coming years. Covid-19 is also shaping the future direction of other aspects of RCM's research, including the health implications of the cessation of live arts activity on mental health in the general population, particularly loneliness (*HEartS* team); *Songs from Home* will develop and trial technology-driven online group song-writing sessions for new mothers in their homes to combat loneliness and social isolation (Waddell and Perkins). Together with two of his doctoral students, Rossi Rognoni undertook a project in collaboration with ICOM-CIMCIM, funded by the RCM's QR-GCRF allocation, to document the pandemic's impact on music museums worldwide.

Meanwhile, the landscape in which all creative artists work has been dramatically changed by Covid-19, and RCM practice-based researchers in composition and performance are having to adapt to new conditions. Research by Tania Lisboa (CPS) over the past seven years in collaboration with conservatoires and universities in the USA, Europe and Asia on the use of low-latency (LOLA) video and audio systems (see Section 3) will be critical to designing and evaluating new tools for real-time online collaborative music-making. Likewise, the learning and assessment of music performance using online technologies will be investigated through new projects under development by Williamon, Clark and Waddell, complemented by other work on the impact of the new environment on music-performance education, such as the project [\*Transforming Performance Pedagogies: Interactions between New Technology and Traditional Methods\*](#) (Society for Higher Education Research, 2020–21) led by Guillaumier and the most recent RCM appointee, Diana Salazar.

## Section 2. People

### Staffing Strategy

In REF 2014, the RCM submitted outputs of 23 staff, of whom just 11 remain in post in 2021, others having either retired, left the institution, or ceased to be Category A. 22 new staff are included in the 2021 submission, which is a direct outcome of the RS 2014–2021. During the submission period there have been new appointments or moves by teaching-only staff into Category A in all areas of RCM research: historical musicology (new Category A staff: Guillaumier, Hewett, Kawabata, Meyn, Roper, Rossi Rognoni, Wistreich and Wright join Langham-Smith, Lawson, Loges, and Thormählen); composition (Cole, Kay, Kittos, Mival and Scarlato join Hesketh, Holt and Turnage); music performance (Driver and Johns join Solomon and Charlston); performance science (Spiro, Clark and Waddell join Lisboa, Perkins and Williamon); and music education, a new specialist area for the RCM and, indeed, for UK conservatoires in general (Henley (now left), Camlin, Pitt, Stakelum). In 2017 the RCM established the honorary title of Reader, awarded for distinguished achievement in any aspect of scholarly research; two appointments have so far been made: Loges (now Professor) and Perkins. Between 2014 and 2020, awards of personal chairs (Professor) for outstanding, internationally recognised achievement in research were made to six members of RCM staff (Charlston, Herbert, Loges, Rossi Rognoni, Solomon, Wistreich). The institutional research staff environment is stable (all Category A staff are on permanent contracts) and well-balanced in terms of senior and younger scholars (currently nine Professors, one Reader, three Research Fellows in Performance Science, fourteen mid-career staff (Lecturer or Senior Lecturer level), and six ECAs or others new to research. There are also currently five Research Assistants who are not Category A.

### Staff Development

The RCM has adopted the *Concordat to Support the Development of Researchers* (September 2019) and progress with fulfilling its principles is monitored annually by the RC. Category A staff produce annual strategic research and impact plans reviewing achievements and goals, publication and other dissemination of outputs, impact plans and associated activities, each keyed into the aims of the RS. Regular research planning meetings with the DoR and annual appraisals by line managers are used to ensure appropriate career development support, especially for ECAs and those relatively new to scholarly research culture, such as composers and performers. Since 2014, all new staff appointed to Category A contracts are required to have a doctoral qualification or equivalent, and evidence of publications that are of at least of ‘international significance’ or be able to demonstrate clear potential to achieve these goals. Staff who do not yet have a research qualification are supported to undertake part-time RCM Master’s or doctoral study, including a new route for doctorate by publication. Staff fees for RCM research degree programmes are subsidised through the College’s Professional Development Fund.

All RCM staff have access to the Internal Research Fund to support costs of attending conferences as a presenter; visiting archives and libraries; and expenses associated with publication of outputs, such as image-use rights, music typesetting and indexing. Applications to the fund are evaluated by the DoR and monitored by the RC. There is no fixed allowance for each researcher as needs vary considerably. Additionally, researchers are invited annually to apply for funding for qualifying projects or seed-funding for developing new research through QR-GCRF and the Strategic Priorities Fund.

### Equality and Diversity

All staff appointments and applications for research degrees are subject to the RCM’s Equality, Diversity and Inclusion policies (<https://www.rcm.ac.uk/about/strategies-values/people-equality-diversity/>). Staff on appointments panels have undertaken unconscious bias training and panels are gender balanced. However, the RCM lags some way behind achieving representative diversity of gender, race and disability, especially in senior positions. The DoR currently leads an institution-wide Diversity Action Group tasked with addressing unfair discrimination, including in appointments;



a specific requirement to promote diversity in all aspects of research strategy and project design was added to the terms of reference of the RC in 2020. Regular meetings between the DoR and research staff allow for close monitoring of each individual's progress, and issues of equality and diversity, including special or changing circumstances (for example, child or other caring responsibilities, especially pertinent during Covid-19). These factors also underpinned the regular EIA monitoring by the Head of HR of processes involved in selection of outputs for REF. Work-loading patterns vary according to each staff member's specific role in the RCM; however, basic research time allowance is pro-rata equivalent of 35 days per year (c. 20%, excluding leave and statutory holidays); additional time can be negotiated to accommodate intensive primary research and writing-up periods where necessary. The RCM does not have the resources to fund regular sabbatical leave, but temporary relief from teaching and administration duties during term time can be negotiated to focus on a specific project; this includes external consultancy and knowledge exchange. Additional grant-funded research time (e.g., PI/Col fractions or mid-career fellowships) is supported by the College.

All research is subject to the *UUK Concordat to Support Research Integrity*, which has been adopted by the RCM. Research which requires ethical approval is scrutinised by the RCM Research Ethics Committee, reporting annually to Senate. Externally funded research in which the RCM is the lead RO, any project that involves collaboration with another UK conservatoire, or is particularly complex or potentially controversial, is submitted for further scrutiny by the CUK Research Ethics Committee.

## Research Students

The RCM currently has 43 registered full- and part-time doctoral students, pursuing projects that ally closely with the research specialisms of staff. 47 students have graduated since 2013/14 and a further 9 are expected to submit by the end of 2020/21. The doctoral programme is overseen by the Research Degrees Committee (RDC); day-to-day oversight is maintained by the Head of Postgraduate Programmes, supported by Registry staff. RDC approves offers to applicants; monitors student progress, including appointing supervisory teams; it acts as the Board of Examiners for the recommendation of degrees.

The RCM offers two institutional fees-only studentships and 50% match-funding for the first two AHRC full studentships awarded each year (further DTP studentships are fully funded by AHRC); it also provides bursary fees support to approximately 60% of students. In 2018, the RCM was part of a successful bid for DTP funding by the London Arts and Humanities Partnership AHRC DTP (LAHP), made up of UCL, KCL, LSE, QMUL, School of Advanced Studies, Royal College of Art, Royal Central School of Speech and Drama, and the RCM. In its first year (2019), LAHP awarded 90 full AHRC studentships across 26 subject areas, including six in music. RCM applicants were awarded three open studentships and one CDA, a collaboration between CPS and BAPAM; in the 2020 cycle, RCM was awarded two studentships in the open competition and a second CDA, joint-supervised with the Natural Voice Network.

Our infrastructure for doctoral research meets or exceeds the requirements of all the UK Research Councils' and QAA standards. Students are supervised by a minimum of two: a directing supervisor (DS), who must have supervised at least one doctoral candidate to completion, and a second supervisor; if appropriate, one or more advisors are allocated to the team for specific expertise (e.g., for DMus students). Where the RCM does not have sufficient specialist expertise, a second supervisor may be engaged from another institution, subject to the same monitoring as in-house supervisors; however, the DS is always a member of RCM staff, and ensures the student is supported through their programme, including regular meetings, preparing for transfer and organising a mock viva before the final examination. Examination panels are appointed by the RDC: one internal and one external for transfer examinations, and two external examiners for final examinations. No member of any examination panel may have been a member of the candidate's supervisory team. A comprehensive one-year training programme is undertaken by all new students, supplemented by annual one-day public engagement and supervision management training events for the whole cohort and their supervisors, and other occasional public events such as composition and performance showcases, organised by the students themselves. All RCM doctoral students can

participate in any training programme offered across LAHP, which includes a wide range of languages at different levels, digital humanities and archival skills, public engagement, and career development events. Each student has bi-annual meetings with the Head of Programme to monitor progress and identify specific training needs. Students are allocated a basic allowance (currently £250 p.a.) to subsidise participation in research conferences, travel to libraries and archives, and similar; in specific cases (e.g., presentation at overseas conferences) additional support is provided. Students can apply for graduate teaching opportunities on undergraduate and some postgraduate modules each year. Through a rigorous training and mentoring programme, they gain invaluable HE-teaching experience as well as application and interview practice.

Doctoral students have free access to all performance and recording facilities at the RCM (see section 3). There is a dedicated doctoral researchers' room equipped with hot-desking and access to music-composition and other software. Doctoral students are allocated a personal web-profile page on the RCM's main site. The RS2021–27 includes provision of enhanced physical and digital facilities for research students in the new estate, including larger dedicated workspaces.

### **Section 3. Income, infrastructure and facilities**

#### **Research income**

Research at RCM is funded through a combination of institutional QR (including QR-GCRF and Strategic Priorities Funding), and indirect costs in external research and knowledge exchange grants. This contributes to the salary costs accounted for by c.20% pro-rata workload time for Category A staff (and 20% FEC top-up for staff employed directly through research grants); administrative staffing and overheads of the Research Office; supports the salary of the DoR; and provides discretionary funds for incidental staff and doctoral student research costs, RCM-sponsored conferences and the public lecture series.

Grant income from research councils, charities and other external funders during the submission period was £3,577,000. The total value of grants awarded (RCM only, RCM as lead organisation, and RCM as partner organisation) was over £4.6m, with £3.7m awarded specifically for RCM activity, some of which extends beyond the submission period. RCM composers and performers receive fees for specific commissions and performances that provide significant opportunities both for developing research and disseminating its outputs, and for generating and tracking its impact on cultural and economic beneficiaries. For example, all the research outputs underpinning Impact Case Study 3a were developed in collaboration with music-commissioning bodies. The RCM receives QR-GCRF finance (c. £24K in 2019/20). This supports research projects in ODA countries including Brazil, Bolivia, and China, including seed-funding larger projects. The RCM's GCRF three-year strategy received Research England's Special Commendation in 2018 in recognition of its clear strategic focus and for how development-related research activity has been embedded within the institution's wider strategy and activities (<https://re.ukri.org/funding/our-funds-overview/global-challenges-research-fund/>). It was particularly praised for demonstrating that small allocations of funds can be used effectively by specialist institutions, and its focus on enhancing existing collaborations with developing countries.

#### **Infrastructure and facilities pertaining to research impact**

Investment of c.£62m in new estate and digital infrastructure since 2014 has been largely focused on new facilities which will enhance research in the future. Researchers benefit from full access to the RCM's performance venues, which include the 400-seat Amaryllis Fleming Concert Hall, 400-seat Britten Theatre, and the brand new 150-seat Performance Hall, 90 seat Performance Studio and smaller performance spaces in the new RCM Museum, plus two 50-seat seminar/performance Parry Rooms. All these venues are fully equipped for audio and HD video recording and live-streaming, with high-speed fibre and broadband wi-fi throughout the College.

RCM Studios is a commercial-grade facility, equipped with professional audio, video and composition technologies, enabling live broadcast of performances around the world; it includes a recording studio and editing suites. The studios support LOLA real-time simultaneous music performance between similarly equipped venues in multiple international locations and is available for collaborative composition and performance research. The RCM's Performance Simulator is a permanent laboratory space which allows physiological monitoring before, during and after live performance in front of simulated audiences. Its technology is used not only to support the enhancement of musicians' training, but also to study performance anxiety and comparable high-stress presentation such as facing news conferences or in business 'pitching'.

The **RCM Collections** contain over 15,000 instruments (many playable), portraits, engravings and sculptures, and other music-related objects spanning more than 500 years; internationally significant music manuscripts including autograph scores; letters and other biographical materials; more than 750,000 concert programmes charting the history of live performance since the seventeenth century, especially in London; and extensive collections of printed music, including unique items from the sixteenth century onwards. Data about all the Museum holdings are also available through the open-access digital catalogue (<http://museumcollections.rcm.ac.uk>), developed and maintained by the RCM, linked into major international repositories such as Europeana, Google Arts & Culture, ArtUK, MIMO and Cecilia. With its associated environmentally controlled Performance Studio and the Wolfson Research Centre for Material Culture, the new Museum will provide an unprecedented resource for future research into the history and contemporary manifestation of art-music performance.

The RCM is a creative performance environment made up of many hundreds of elite-level musicians and professional support staff including instrument technicians, lighting, audio and video engineers, who participate in, support, and showcase its research. The RCM's extensive artistic and events programme regularly features public dissemination of research activities. Its central website, satellite sites for specific projects, and its YouTube channel provide open access platforms for research outputs and generating impact activity. Print, broadcast and other public communication about research and other relevant news is managed by RCM Marketing and Communications; coverage in national and international press and broadcasting, and across social media has increased substantially since 2014.

The RCM established a Research Office (RO) in 2015 staffed by a Research and Knowledge Exchange Manager, Research Finance Officer, and CPS Administrator. They manage all aspects of research, including external funding bids and post-award grant administration; support dissemination events including conferences; and provide administration for reporting exercises (REF, HE-BCI, KEF, GCRF, etc.). All proposals for externally funded research projects begin with the logging of a formal Expression of Interest and are subject to a monitored timetable during which the DoR and RO staff advise on finding suitable funders, preparing texts and budgets, and coordination with collaborating partner organisations, where relevant; all bids and grant acceptances are signed off by the DoR before submission.

RCM Research Online, the College's open-access research repository, was developed in 2015/16 with support funding from JISC. It currently contains data for all RCM staff research publications, including journal and conference proceedings, books, scores, recordings, published reviews and journalism by RCM staff, and completed doctoral dissertations. The RS2021–27 commits to creating an open access repository for all RCM research data.

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

### Research Collaborations, networks and partnerships.

A high proportion of RCM's research projects involve collaboration with one or more partners, including academic and charitable research institutions; public sector organisations such as performance venues and ensembles; healthcare providers, schools and community music settings; libraries, archives, museums, galleries and historic buildings; Arts Councils and unions; and commercial music industry enterprises, particularly recording companies, publishers and software developers.

While most partnerships are created for specific projects, some have led to enduring relationships. Principal among these is the joint RCM/ICL Centre for Performance Science (see section 1). Particularly fruitful collaborations involve ICL's Faculty of Medicine, based at St Mary's, Charing Cross, Hammersmith, and Chelsea and Westminster hospitals, which host a range of RCM research. During the past ten years of his work on German-speaking émigré musicians, Norbert Meyn has established close partnerships with Glyndebourne, Senate House Library, the Manx Museum, The Migration Museum, The International Institute for Suppressed Music, ExilArte Vienna, Akademie der Künste, Berlin and the Music and Migration Archive in Salzburg. The RCM's links with the German Historical and Austrian Cultural Institutes have benefited several projects and impact events organised by Meyn, Loges and Thormählen, while regular collaborations with the Royal Collections have been instrumental in Solomon's historical performance research. Continuous involvement with the international network of music museums has led to long-term collaborations with the Association of Chinese Music Museums, and the Association of Russian Music Museums, as well as institutions in France (Musée de la Musique), the USA (Yale University), and the UK (particularly The Horniman Museum, London and the University of Edinburgh).

### Relationships with key research users, beneficiaries and audiences

The users, beneficiaries and audiences for RCM research fall broadly into four categories:

- academic and other specialists
- music performers, teachers, and students
- the wider musically engaged public
- patients and staff in therapeutic settings

Sharing of research with scholarly users occurs mainly through academic publication and presentations at conferences and seminars. Performers, students and teachers of music also benefit from online resources hosted on the RCM's website (<https://www.rcm.ac.uk/research/>), including short videos, which now play a key role in the dissemination of the practical side of RCM research, exemplified by the work of CPS in the field of performers' health, especially in elite training situations; open-access music scores and recordings of performances and filmed oral history interviews in Meyn's research on émigré musicians; and resources for use by both curators and the general public in animating historic houses that are part of Thormählen's work on Georgian domestic music-making. Commercial recordings and broadcasts, as well as more informal online access to artistic research through platforms such as YouTube, Spotify, Apple Music and SoundCloud provide important and easily accessible supplements to the live performances of artistic and performance-led research outputs. During the submission period, staff have been invited to give more than 30 headline keynote addresses at international conferences, and over 30 major commissions were awarded to RCM composers by chamber ensembles, orchestras, opera houses, and international festivals. For example, Simon Holt was featured composer at the Aldeburgh Festival in 2018, while his work has been the subject of a full-length volume of essays edited by David Charlton (Boydell, 2017).



Application of research findings in pedagogical and clinical settings that benefit patients, care-staff, music learners, amateur and professional musicians, and curators is further supported through workshops and other training. For example, Rossi Rognoni's *MINIM-UK* project (<https://minim.ac.uk/>) provided custom-built software and training for museum curators, adding over 4.000 previously uncatalogued instruments in 25 collections large and small across the UK. With support of QR-GCRF, Rossi Rognoni and a research assistant trained curators and cataloguers to produce MIMO and MINIM compatible digital records of instruments at the Hunan Museum Collection, China (2019). Solomon's work in training young musicians and their teachers in Bolivia in the skills to perform historical music has had far-reaching impact well beyond the preparation of performances of large quantities of re-discovered Bolivian Baroque music, including in education, and in cultural infrastructure (see Impact Case Study 3b). Perkins has trained clinical practitioners on the uses of music participation to support the mental health of new mothers, developed from research she conducted from 2016–18 (see Impact Case Study 3c).

Performers, students, and teachers use RCM musicology research outputs and data in the form of books and articles, recordings, scores, and a variety of online resources. These range from critical editions of major works, such as Langham-Smith's revised urtext edition of the score and orchestral material for Bizet's *Carmen* (2018), which is the basis of most new international productions, to performing editions of recovered manuscripts, never before published, such as the 16 chamber works by Peter Gellhorn, available open access and free-to-download from the project website, and Charlston's critical editions of 16th- and 17th-century English keyboard manuscripts. RCM staff have authored or edited music monographs, reference books and essay collections aimed at users ranging from scholars, students, and performers, to the general musical public. They include a variety of encyclopaedias and general histories, conference proceedings and themed essay collections, single composer and single work studies, and numerous contributed chapters to a wide range of 'Companions' in specialist fields, mainly produced by large university publishing houses and aimed at both academic and general audiences. A yet broader group of beneficiaries of RCM research is served through programme notes and pre-concert talks, CD inserts, and articles in trade magazines and national newspapers that are regularly produced by performers, composers and musicologists to support enjoyment of live and recorded performance of music. In the field of music journalism, for example, Ivan Hewett publishes at least 200 articles and comment pieces a year as music critic of the *Daily Telegraph*, as well as articles in *Prospect Magazine*, *BBC Music Magazine* and elsewhere. He has also written and hosted four five-part series on aspects of music for BBC Radio 4. Loges, Lawson and Mival are regular contributors to BBC Radio 3's 'Record Review'; and several researchers give pre-performance talks at London's main music performance venues, many of them also broadcast, including at the BBC Proms.

RCM composers and performance researchers have, in many cases, long-standing commissioning relationships with particular ensembles, venues, and recording companies, and this provides them with opportunities to develop research into outputs that achieve often very wide impact, through performances in national and international concert and opera venues, and festivals, broadcasts and commercial record releases. For example, Mark-Anthony Turnage's commissions by the Royal Opera House, Covent Garden have continued in the present REF cycle with the ballet score, *Strapless* (2016), and his opera for families, *Coraline* (2018); similarly, his relationship with Simon Rattle has continued with *Remembering: in memoriam Evan Scofield*, commissioned to mark Rattle's departure from the Berlin Philharmonic and his arrival as Chief Conductor of the LSO (2017), released on LSO Live the same year; Turnage's double violin concerto for Vadim Repin and Daniel Hope, *Shadow Walker*, toured four European countries in October 2017. His setting of Ukrainian texts for soprano and orchestra, *Testament*, received first performances in 2018 conducted by Kirill Karabits in Bournemouth and Weimar, and his song cycle *Refugee*, written for the tenor Allan Clayton and the Britten Sinfonia was premiered in Bucharest in 2019. Most of his works are broadcast and subsequently appear as commercial recordings (see Impact Case Study 4a). During this submission cycle, Ashley Solomon has recorded three CDs as a soloist in research-based

projects and four further recordings of Baroque repertoire with his ensemble Florilegium for Channel Classics, a company with which he has worked closely for 20 years. His regular appearances on BBC radio and at venues such as the Wigmore Hall has created a large and loyal audience following. Artistic researchers also engage with audiences and other beneficiaries such as young musicians through associated educational programmes, talks, media interviews, summer schools, and competition juries.

### **Wider activities and contributions to the research base, economy and society**

RCM staff serve as Editors or on the editorial boards of numerous peer-reviewed journals, including *Frontiers in Psychology*; *Performance Science Research Studies in Music Education*; *Musicae Scientiae*; *Approaches: An Interdisciplinary Journal of Music Therapy and Journal of Music Therapy*; *Performance Practice Review*; *Music Education Research*; *Renaissance Studies*; *Early Music History* and the *Historic Brass Society Journal*. RCM researchers have guest-edited special issues of *Arts and Humanities in Higher Education Journal* (Guillaumier, 'The Conservatoire in the 21st Century', 2020); *Nineteenth Century Music Review* (Herbert, 'The Experience of Listening to Music in the 19c.', 2020); and the *Huntington Library Review* (Wistreich, 'Voices and Texts 1500–1800', 2019). Staff also contribute to the research base through membership of advisory boards of major institutions: Rossi Rognoni was President of CIMCIM (2014–19) and of the Italian Early Music Association, member of the Scientific Board of the Museum of the Violin in Cremona, the Scientific Committee of Fenton House (National Trust), and board of the Galpin Society; Wistreich was successively Vice-Chair and currently Chair, Society for Renaissance Studies (2016–22) and is on the Advisory Councils of the Warburg Institute and the V&A Research Institute; Williamon is a Trustee of BAPAM and serves on the Executive Committee, Society for Education, Music and Psychology Research (SEMPRE); Perkins is a member of the AHRC Peer Review College; Pitt was successively Chair and now Trustee of Music Educators and Researchers of Young Children (MERYC-UK, 2012–); Spiro is a member of the Music Therapy Charity Research Committee; Loges was a Council Member, Royal Musical Association (2017–20); Thormählen serves on the Steering Committee of MusicHE.

Research staff act as external examiners for research degrees and on research degree validation panels at numerous universities and conservatoires in the UK and overseas. They also peer-review for a wide range of journals and academic book publishers. RCM composers and performers served on the juries of numerous international competitions. RCM researchers currently hold visiting professorships at McGill University (Canada), Universidade do Minho (Portugal); University of Washington, WA (USA); Université du Metz; China Conservatory; Universidade Federal da Bahia (Brazil); Nanyang Academy of Fine Arts (Singapore).

**Awards and prizes** CPS was awarded the Arts and Health Award of the Royal Society of Public Health, 2016; Trevor Herbert received the Anthony Baines Memorial Prize of the Galpin Society, 2014. Mark-Anthony Turnage and Colin Lawson were made CBE for services to music in 2015 and 2016, respectively. Kenneth Hesketh won a 2017 BASCA Ivors Composer Award and Haris Kittos won first prize in the International Composition Competition 'Città di Udine' (2016). Stephen Johns won a Grammy for Best Classical Solo Album (2015) and his recording of Verdi's *Aida* (2016) won BBC Music Magazine Record of the Year, Gramophone Awards Opera Recording of the Year, and a Diapason d'Or.