

**Institution: Brunel University**

**Unit of Assessment: 35 Music, Drama, Dance and Performing Arts**

**a. Overview**

This submission embraces staff from the subject areas of Music and Theatre in the School of Arts, each managed by a Head of Subject. Research is overseen by a Research Coordinator for each subject area and more generally by the Deputy Head of School (Research) and the School Research Committee. All research is driven by the School's strategic mission, 'to become a distinctive and world-leading research centre operating at the forefront of critical and theoretical debates, and at the cutting-edge of artistic research practice'. For REF 2014 we will enter outputs from 9 Music researchers and 10 Theatre researchers, including monographs and edited books, refereed journal articles and book chapters, compositions, performances, CDs and DVDs.

**b. Research strategy**

Brunel University is committed to practice-based research in Theatre and Music, with particular emphases on innovation, social engagement, collaboration and interdisciplinarity. Music at Brunel now has one of the largest groups of staff researching contemporary music practice in any British university. Their work embraces composition, improvisation, musicology and performance and is consistently predicated on the belief that, while research in music is most effectively conducted through the primary discourse of music itself, that research must be underpinned by theoretical rigour. In Theatre the research focus has primarily been on the contemporary, involving performance-writing, theoretical and practical investigations of the performing body in complex digital environments, and the role of new interactive technologies in reconfiguring the traditional performance paradigm. Recent appointments, however, in particular that of a professor with expertise in early modern theatre and the staging of historical drama, have significantly extended this focus, adding a richer and deeper historical perspective and a greater involvement with socially engaged theatre practice.

The success of the Music and Theatre (then Drama) submissions to RAE 2008 reflected the progress made by emerging research teams, formed as part of Brunel's commitment to becoming a research-led university. Since 2008 the main focus of the research strategy in both Music and Theatre has been to build upon and invest in the key areas in which they have gained national and international repute, in particular in practice-as-research, and to achieve a greater coordination of strategic research activity, an issue raised by the RAE assessors. The University's commitment is reflected in substantial investments from its capital funds to improve the research facilities for performance, in particular, the £3.2M spent on developing the Antonin Artaud Building which now offers state-of-the-art performance, rehearsal and recording spaces. A further development has seen the consolidation of all staff offices and digital resources within the Artaud and Gaskell Buildings. Music and Theatre are committed to practice-based and theoretical research based on collaborative performance and since its re-development the Antonin Artaud Building now provides an ideal advanced research infrastructure within which this work can take place.

The majority of research in Music and Theatre is coordinated within two University Research Centres, for Music the Centre for Contemporary Music Practice (CCMP) and for Theatre the Centre for Contemporary and Digital Performance (CCDP). In addition, two university institutes, the Brunel Institute of Composing and the Brunel Institute for Contemporary Middle Eastern Music (BICMEM) promote aspects of this research beyond the University. Both the CCMP and the CCDP have at their core a rigorous interrogation of current musical and performative practices through the creation and study of innovative new work of the highest quality, radical in its approach to process, language, and new media practices. Their strategic goals are:

- to be centres of national and international repute, exploring the aesthetic, cultural and technical issues involved in contemporary music practice and multimedia theatre practice
- to develop craft, technology and leadership skills appropriate to diverse musical and performance activities;

- to foster relationships with professional practitioners of the highest calibre, fully integrating them into the research process;
- to maintain a vibrant postgraduate research community;

Music's current research clusters around five interrelated areas, exploring (i) relationships between composition, improvisation and notation, (ii) new instrumental resources, especially those involving acoustic instruments and live electronics, (iii) new possibilities within music-theatre, (iv) the creative potential of different tuning systems, and (v) relationships between text, voice and culture. Theatre's research strategy is organised around four principal areas: (i) digital performance, digital art and interactive wearable design; (ii) performance-writing and live performance-creating; (iii) socially engaged performance practices and the politics of drama and community; (iv) transcultural performance and gender studies in performance.

In the last RAE, Drama at Brunel set out four key future research aims: to focus on building strong international links in the field of contemporary digital performance, to develop new collaborations, to grow the number of research students, and to increase external research income. The unit's success in developing strong international links is reflected in Baker's EU-funded project, FET-ART, and Birringer's EU-funded project, METABODY, which involves artists from 14 countries. The unit has developed a number of new external collaborations and has sought specifically to appoint new members of staff who have existing partnerships, for example, Betteridge with Goat and Monkey Theatre Company and Mitra with the Akram Khan Company and Vincent Dance Theatre. The unit has seen a substantial increase in research funding during the REF period; for example, Baker has recently been awarded €124K from the EU's FP7 scheme.

It is planned to extend the development of the research activities of both Music and Theatre over the next five years, with a particular commitment to collaborative ventures such as the recently established annual ARTAUD Forum and BEAM Festivals, both based in the Artaud Performance Centre. In the period since 2008 Music has seen a progressive increase in collaborative working and the sharing of research expertise across the five areas detailed above. For example, in 2012 Croft, Fox and Walshe all premiered major music-theatre works, each promoted as an 'opera', and Fox was invited to give a key-note address at York University's 'Digital Opera' conference. The development of those works also involved research into live electronics. In Croft's case this involved collaboration with Faia on the development of digital signal-processing programming, while Walshe's opera involved researchers in digital game technology from the Screen Media subject area of the School of Arts. Nicolls's research has also involved collaborative commissions to create new performance environments using live electronics at the piano, working with leading figures in this field such as Atau Tanaka.

Similarly, Wiegold's research in combining elements of composition and improvisation resulted in his 2009 work *Bow-Wave*, commissioned by the National Youth Orchestra and written in collaboration with the orchestra during a series of intensive workshops, while at the same time Nicolls was engaged in *Pool-Side*, a collaborative improvisation/composition project which has been shown at the De La Warr Pavilion, Bexhill and King's Place, London. This work also featured the 'Inside-Out Piano', designed and built by Nicolls in 2008; Nicolls now has funding to build a second prototype in 2014 with the Parisian piano builder, Pierre Malbos. Research into the use of the voice draws together a number of staff. Muenz is both composer and performer with the voice trio *Sprechbohrer*, who in 2009 produced a double CD of the landmark sound-text scores of Hans G Helms; Walshe's vocal improvisations are based in a similar exploration of paralinguistic phenomena, as was Fox's new work *one/two/three/four-piece*, commissioned for the Barbican's 2012 Extraordinary Voices festival.

In Theatre, research in digital performance is based on a distinctive trans-disciplinary vision which fuses artistic performance, theatre and live art with new media technologies and creative software writing/engineering. Theatre researchers at Brunel have been at the forefront of international research in 'digital performance' since the mid-1990s, through influential monographs (Birringer, Broadhurst), polemical discourses and manifestos (Birringer, Stelarc), the organisation of international networks, workshops and conferences (Baker, Birringer, Broadhurst), ground-breaking technological experiments (Baker, Broadhurst, Ploeger, Stelarc).

Research into performance-writing and live performance-creating has seen innovative contributions to performance-writing/devising, documentation processes and performance theory (Richards, Templeton) and practice (Elliott, Richards, Templeton). Elliott is Co-Investigator on the AHRC funded project 'Stories of user appropriation' which aims to transfer knowledge from the creative economy about creative innovation processes to the wider economy. Richards's research is concerned with the relation between the life immediacy of performance and the experience of the audience as reflected in her article, 'Specular Suffering: Staging the Bleeding Body'.

Research into socially engaged performance practices and the politics of drama and community politics links the work of Betteridge, Chow and Donovan. Chow's work, and in particular his performance piece *Work Songs*, is concerned with the evaporation of labour from the aesthetics of performance. The scope of this piece is reflected in the range of its collaborators, which includes Tom Wells, Dr Louise Owen and Dr Will Daddario. The recent appointment of Betteridge has strengthened this aspect of Theatre's research; his work on the interface between politics, drama and heritage is reflected in projects with Historic Royal Palaces and Historic Scotland. Theatre's research into the politics of cultural engagement has been enhanced by collaboration with Dr Claire Donovan of Brunel's Health Economics Research Group. Donovan's 2013 report for the Department of Culture, Media and Sport, *A Holistic Approach to Valuing Our Culture*, was jointly-funded by the AHRC, ESRC and DCMS and has influenced recent government policy; a series of collaborative research projects is planned which will further develop this research into the measurement of cultural value.

Theatre has strengthened its research into transcultural performance and gender studies through the appointment of Mitra and Peterson. Mitra's work concentrates on the work of the choreographer Akram Khan and in particular the intercultural nature of his work. A similar theme is pursued by Peterson in his work on sexuality, in particular the intersection of gender, sexuality and dance. Both Peterson and Mitra will build our ability to investigate how dance enables the articulation of specific identities, often in opposition to the prevailing norms.

### **c. People, including:**

#### **i. Staffing strategy and staff development**

Music and Theatre staffing strategies are designed to promote world-leading research and support a vibrant academic environment and reflect the wider policies of the institution as a whole. Brunel University's researcher support procedures have been awarded the European Commission's 'HR Excellence in Research' (2011) in recognition of its commitment to the *Concordat to Support the Career Development of Researchers*. Early-career staff are assigned a mentor, have reduced teaching and administrative responsibilities, and are provided with additional funding for conferences and equipment. All Lecturers and Senior Lecturers in the School are appraised annually by a member of the professoriate; Readers and Professors agree their targets for the coming year with the Head of School.

The success of these strategies is clearly visible both in staff members' participation in national and international conferences and in the range and quality of their publication outputs. These in turn form part of a more general strategy in Music and Theatre which encourages collaboration between researchers; the development of a series of research clusters in the period since 2008, outlined in the previous section on Research Strategy, demonstrates the success of this approach.

The University promotion process is criteria-based and overseen by Senate; it actively rewards research excellence and since 2008 eight members of staff in Theatre and Music have been promoted, six to Senior Lecturer, one to Reader and one to Professor. As part of the promotions process, the university organises workshops, led by the University Equality Champion, to support women intending to apply for promotion; of the eight staff promoted four have been women. The overall promotion process is subjected to an annual Equality Impact Assessment which is used to drive improvements in the equity of the process.

Care is taken to balance the competing claims of managerial, teaching and research roles; for example, after a period as Deputy Head of School (Undergraduate), Elliott is now a participant in

the 'Stories of User Appropriation' interdisciplinary project, a collaboration between the School of Engineering and Design and the School of Arts at Brunel and Nottingham University which has received a £250K AHRC Creative Economy Knowledge Exchange award.

Study-leave support at both University and School level is available and during the REF period Croft, Fox, Nicolls and Wiegold (Music) and Richards and Templeton (Theatre) have benefited from periods of leave, enhancing the quality and ambition of research outcomes and enabling personal career development. As is the norm in the creative arts, many researchers, particularly those involved in practice-based work, are directly engaged in professional performance and this is facilitated by a flexible approach to the allocation of teaching loads. The lively exchange between academia and the arts professions is one of the acknowledged strengths of research at Brunel and was enhanced by the 2011 launch of the university's Collaborative Research Network in Creative Industries. Music and Theatre staff have had a significant involvement in this network, promoting knowledge exchange through collaborative projects such as Will Self's 'Kafka's Wound' (<http://thespace.lrb.co.uk>), a multimedia experiment in composition and media authorship involving Birringer, Chow, Richards, Wiegold and several undergraduate and postgraduate students.

A consequence of the dynamic research culture at Brunel has been the rapid early-career progression of a number of staff who have, as a result, been invited to move to other institutions. The recruitment of new early-career researchers has focused on maintaining the principal research areas in Music and Theatre but has also introduced additional strengths in musical theatre, musicology, directing, sonic arts, media performance, and theoretical research on gender and sexuality in performance. The recent appointment of a professor in the history of theatre practice will further strengthen research in Theatre.

The University's Research Support and Development Office (RSDO) provides expert assistance in the development, costing and submission of grant proposals. Music and Theatre have been vigorous and proactive in prioritising the advancement and sustainability of its research culture, supporting staff and funding them for conference presentations, performances and film documentation. In both Music and Theatre funding has been prioritised to support early-career staff in developing appropriate research networks; through its BRIEF scheme (Brunel Research and Innovation Fund) the university funds support for new academics within three years of their arrival at Brunel. Funding is available, both from the School and by application to the PVC Research, to support the purchase of specialist equipment and project completions. The University also funds an Athena SWAN Research Award to support researchers returning from maternity leave. Nicolls's research, for example, has flourished with support from these schemes; as a new academic she received funding to develop her research from BRIEF and subsequently, after the birth of her first child, she has received an Athena SWAN Research Award. The University is accredited by the EU for, HR Excellence in Research, for the quality of its strategy for supporting research careers.

## ii. Research students

Research students are thoroughly integrated into the Music and Theatre research community at Brunel and this in turn has contributed to a growth in numbers of PhD students, particularly those engaged in practice-based research. Research students are allocated two supervisors from the full-time academic staff and joint appointments across disciplines are often made, both to enable students to draw on different expertise and perspectives and to allow more experienced staff to mentor early-career staff in research student supervision. Brunel has a comprehensive monitoring system for research students, involving progression reviews, annual monitoring reviews and supervision records. In both Music and Theatre completion rates are excellent (c.85%), demonstrating not only the effectiveness of the supervision and monitoring procedures but also the rigour with which the interviewing process for prospective students is undertaken.

The Music postgraduate community at Brunel grew considerably after new professorial appointments in 2006 and at its largest has numbered 32 students. 17 students are currently registered for PhD degrees and during the period since 2008 25 students have successfully completed PhDs, on topics which range across the new music spectrum, from performance practice to instrumental composition, from the innovative use of obsolete technologies to the creation of new virtual instruments for live multimedia performance. In Theatre the number of research students has grown steadily, with a total PhD community in the REF period of 21, a 300%

increase from 2008. Theatre has also made a strategic reorganisation of its MA programme to act as a feeder to postgraduate research and the number of MA students has increased from 3 in 2008, to 8 in 2009, 10 in 2010, and 12 in 2011. While most students are self-funding, 3 had support from the AHRC and 2 from Brunel's own Isambard Scholarship scheme. In addition, in 2012 the School of Arts offered a number of fee-waiver bursaries. In 2012 a Music research student won the Maconchy Award, an Irish Arts Council grant giving full funding for three years of PhD research.

The research centres in Music and Theatre run seminar series which promote a transdisciplinary research culture involving both staff and student researchers. Each series hosts up to 10 guest speakers and/or visiting artists each year. In Music recent visitors have included the composer Peter Ablinger, the improviser Steve Beresford, and musicologists Kyle Gann and Andy Hamilton; in Theatre recent seminars have focused on issues of gender and sexual politics in performance, research-as-practice and curating new media arts, featuring artists and scholars such as Jaime del Val, Caroline Bergvall, Ron Athey, and Nicolas Salazar. Since 2011 Music have also presented a number of speakers each year within the seminar programme of London University's Institute for Musical Research, including Patricia Alessandrini, Paul Griffiths and Frederic Rzewski.

Research students in Music and Theatre benefit from the year-long training programme organised by the Graduate School, seminars and workshops designed to support students at every stage of their development. They can also participate in the wide range of cultural activities offered by the University Arts Centre. A shared programme with the School of Social Sciences offers research students an annual series of 26 master classes on a range of research skills. In addition, the School of Arts has a doctoral training programme with workshops on research methodologies and writing and within Music and Theatre there are discipline-specific sessions on the nature of practice-as-research and different approaches to the documentation of creative practice.

In 2009 the School of Arts established the 'Researching the Arts' conference as an annual showcase for research students across the School to present papers and show practice-based research work. The conference is centrally funded through the Graduate School. In 2012 the organisation of this conference was successfully handed over to the students who were mentored by staff in the development of skills in paper selection and conference programming. The students have now entered into partnership with Westminster University, opening up the conference in 2013 to research students from other disciplines and institutions UK and EU-wide. The Brunel postgraduate environment is also significantly enriched by the annual ARTAUD Forum and BEAM Festival, organised by staff members and providing students with opportunities to present their work to an audience whose reach is both national and international.

Unusually for the sector, research students in Music and Theatre at Brunel are drawn from a very wide range of backgrounds and in both subject areas there has been consistently strong recruitment amongst independent professional artists. Recruitment has been successful in furthering gender equity and cultural diversity, with many postgraduate students arriving at Brunel from overseas. Formal secondments are relatively unusual but research students in Music and Theatre are encouraged to undertake some or all of their work in external professional settings. For example, in 2012-13 a Music PhD student was Artist-in-Residence at the Science Museum; others have made work for, or performed at venues such as the Borealis Festival (Bergen) and King's Place (London), and worked in collaboration with organisations such as Exaudi, Apartment House, Sound and Music and the BBC Symphony Orchestra. Theatre research students have participated in writing workshops with Australian playwright Lachlan Philpott, exhibited video installations in Germany, France, Greece, the Netherlands, and Czech Republic, and performed in Japan and Eastern Europe. Many students attending performances and conferences overseas have benefited from the Vice Chancellor's Travel Prize, a university award scheme designed for this purpose. For example, Grigorios Emfietzis was awarded the Prize to fund his travel to Athens when his opera was shortlisted and then staged in a competition run by Greek National Opera; the completed opera subsequently became part of his successful PhD submission.

#### **d. Income, infrastructure and facilities**

The generation of research income is a target for all research staff and support for research grant applications operates at both departmental and institutional level. Within the School of Arts the

research work of the School of Arts is supported by three administrative staff and a technical team who maintain the research facilities and document the work of staff and postgraduate researchers. The research culture of the School is overseen by the Deputy Head of School (Research) and the School's Research Committee who are responsible for ensuring that each subject area has strategies to sustain the vitality of the research culture.

Information about award opportunities is collected and disseminated by University's Research Support and Development Office (RSDO) and the development of collaborative projects and grant applications is coordinated by the Research Committee and the Music and Theatre research centres. Strategies have recently been introduced specifically to support the strongest possible staff applications to the Leverhulme and Wellcome Trusts and Birringer is also leading a new EU consortium which draws together nine major arts organisations and research universities to develop joint funding bids. Each funding bid is assisted through an internal peer support and review system and an assigned staff member from the RSDO provides specialist advice, including detailed budgeting, throughout the drafting process. The university also provides a programme of events to help stimulate research applications, including the annual 'Buzz' event, run in conjunction with the Research Councils, to develop proposal writing skills and to facilitate networking and cross-disciplinary research.

Researchers in Music and Theatre have been successful in securing grants from a diverse range of sources including the AHRC (£398,713), Arts Council of England (£76,000), Australia Council for the Arts (\$20,000), BBC (£10,000), Britten-Pears Foundation (£4,000), DAAD Berliner Künstlerprogramm (€3,000), EPSRC (£2,675), Faber Music (£2,000), Flanders Festival (€4,500), Huddersfield Contemporary Music Festival (£14,000), Kulturamt Köln (€5,000), Kunststiftung Nordrhein-Westfalen (€40,000), Ralph Vaughan Williams Trust (£800), Rockefeller Foundation, the Wellcome Trust (£82,900.), British Council and the Japan Foundation (£30,159), EU (€124,510). For example, Walshe's opera *Die Taktik* was commissioned by the Stuttgart Opera company who also provided travel and accommodation for a group of Brunel students who had worked on the audio and video components of the score to travel to Stuttgart.

Public engagement with the work of Brunel researchers in Music and Theatre is promoted through a number of initiatives. All Brunel research outputs are archived in the university's on-line archive, BURIA. All new books and CDs published by staff are exhibited in the Arts building, and the Library has consistently stepped up its acquisition of books and research journals. The university has also supported the foundation of the Brunel Institute for Contemporary Middle-Eastern Music (BICMEM) and since 2011 has invested in the formation of a resource centre, accessible on-line, which archives scores, manuscripts and recordings, and a comprehensive database of Middle Eastern composers and musicians. BICMEM also organises international conferences, performances and academic exchanges. The Brunel Institute of Composing was launched in 2012 at the South Bank Centre's 20x12 Festival and curates a series of events linking secondary and higher education with the music profession.

Building on the success of previous inter-disciplinary collaborative schemes at Brunel such as the BITLab, a number of cross-School projects related to the cultural industries have been developed. Theatre Lab and the ScenePool Project provide training in commercial skills and sector specific knowledge in performing arts and ScenePool, the Business School and the School of Arts devised an ISBE/RAKE-funded project to investigate the challenges faced by small-scale theatre companies in producing and marketing new work. A similar project in Music, Music Orbit, promotes workshops, seminars and internships to bridge the gap between students in both secondary and tertiary education with the professional music community. A collaboration with the School of Engineering and Design enabled the residency of a Leverhulme Fellow, Jayne Wilton, who was subsequently invited to show her work at the European Laboratory for Particle Physics (CERN).

Since RAE 2008 the Antonin Artaud Building has become fully operational after a major investment and the University continues to invest in the enhancement of these facilities. The Artaud Performance Centre has a full-time manager and three full-time technical staff and provides a large, flexible performance space for music and theatre together with numerous spaces for rehearsal and recording; it offers an environment within which groups of theatre, performance and sound artists, musicians and digital artists can perform and collaborate in creative practices, particularly those involving new technologies. The ARTAUD FORUM, initiated in 2011, is an annual

symposium and performance laboratory. The inaugural event investigated the confluence of Japanese and European dance avant-gardes and the 2012 event featured ground-breaking research in gesture-controlled live-interactive performance and music, attracting numerous practitioners from the UK and abroad. The 2013 event investigated theatre's role both as a site used by political regimes to discipline bodies into participation and as a site in which bodies, resonating with one another, might resist.

The CCDP has developed an internet TV channel, DAPlab.TV (<http://dance-tech.tv/videos/daplabtv/>), as a means of sharing the work of affiliated research practitioners in theatre and performing arts organisations. This online platform enables innovative convergences of research, distributed through a global network. Since 2009 the Performance Research Seminars at Brunel have been broadcast live to the dance-tech.net server affiliate 'LiveStream' in New York and since 2011 DAPlab.TV has broadcast and archived selected seminars and the ARTAUD FORUM, making them available worldwide.

#### **e. Collaboration or contribution to the discipline or research base**

Collaborative relationships with professional artists and researchers beyond the Brunel campus are at the core of the University's vision for practice-based research in Music and Theatre.

Researchers at Brunel are actively encouraged to engage in developments in music and theatre at every level, both within academia and in the wider professions, and this is monitored through the University's annual appraisal process. Given the relatively small group of staff and students in Music and Theatre, collaborations and partnerships with colleagues in other HEIs and in the professions are seen as being of particular importance in the development and dissemination of research at Brunel. The ARTAUD forum and BEAM festival (the latter funded by Arts Council England) bring artists and researchers to the Brunel campus each year and in 2014 the BEAM festival will partner the NIME festival in London, with Nicolls as Music chair. In 2010 the DRHA (Digital Resources for the Humanities and Arts) conference, organized by Broadhurst and hosted on the Brunel campus, featured 38 performances and 80 papers and was attended by hundreds of delegates from all over the world. Broadhurst has also established a collaborative project, 'Border-Crossing Digital Arts and Social Science: New Methodological Approaches to Embodiment', with London Knowledge Lab, the Royal College of Arts and the London College of Fashion, funded by a £190K ESRC grant.

Since 2010 the CCMP has promoted research events and research-related performance events in central London, at Café Oto and within the University of London's Institute of Musical Research lecture/seminar series, including major figures within international new music such as Francois-Bernard Mâche and Phill Niblock. The Brunel Institute of Composing has a wide range of professional and institutional partners, including the South Bank Centre, Aldeburgh Music, Dartington International Summer School, Boydell and Brewer, BASCA and LSO Soundhub; a major recent initiative was the Composers' Academy, a project for 20 young composers run as part of the 2013 Cheltenham Music Festival. Similarly the Brunel Institute for Contemporary Middle-Eastern Music works with a wide range of partners, including the British Council in Damascus and Cairo and the British University of Cairo, to promote events both in the UK and in the Middle East. Brunel's Artists-in-Association scheme fosters close relationships with professional musicians, currently the ensembles Piano Circus and Apartment House, the sound artist Leafcutter John and the saxophonist Pete Wareham who in 2013-14 is a Teaching Fellow. As well as their regular workshops with students, Apartment House and Piano Circus also have strong creative relationships with staff researchers; Apartment House regularly programme works by Fox and Walshe and Piano Circus work closely with Riley, most recently on his *Double Trio*.

Many researchers have achieved international recognition – Stelarc won the ars electronic Golden Nica prize in 2010 and Walshe is a member of the international composer collective, stock11, giving concerts across Europe – or are involved as consultants with major national organisations – Wiegold is Artist in Association with the Birmingham Contemporary Music Group. Music staff regularly feature in major new music festivals: Croft at the ICMC and Sounds New Festivals, Fox, Nicolls and Walshe at the Huddersfield Contemporary Music Festival, Fox and Walshe at the Ultraschall Festival (Berlin), Fox and Gilmore at the Transit Festival (Belgium), Nicolls at the

Achtbrücken Festival (Cologne), Walshe at the Darmstadt Ferienkurse and the ICA (London), Wiegold at the Dartington International Summer School. CCMP research on the interfaces between new media and new digital technologies is widely disseminated; Faia, for example, realized the complex live electronics involved in Jonathan Harvey's opera *Wagner Dream* (Cyprès Records, 2012) and James Dillon's *Nine Rivers* (BBC SSO, Glasgow 2010).

The CCDP has developed innovative collaborations with outside partners, entering into a partnership, for example, with the Watermans Art Centre International Festival of Digital Art, 2012. DAP-Lab draws international researchers to Brunel and in 2011 Birringer was invited to lecture on DAP-Lab's research at the ars electronica Pixelspaces Symposium. DAP-Lab is also affiliated with the newly founded Performance Academy in Saarbrücken, Germany and has partnerships with TMA Hellerau (Dresden), ars electronica (Linz), ICK Amsterdam, and Reverso (Madrid).

Music and Theatre researchers are actively engaged in promoting their research to a wider audience. Theatre's refereed online journal *Body, Space & Technology*, edited by Broadhurst, is an EBSCO-indexed, interdisciplinary and innovative journal that welcomes submissions on all aspects of contemporary arts and new technologies. Attfield, Croft, Fox and Nicolls publish in journals ranging from *Opera Quarterly* and *Contemporary Music Review* to *Leonardo* and the *Guardian*. Fox and Walshe both featured in *Notations 21* (ed. T. Sauer; New York, 2009), a major survey of innovative practice in music notation. Brunel staff hold a number of editorial positions: Broadhurst is a series editor for Palgrave Macmillan and others are active on editorial boards or as peer reviewers, including PAJ Publications (Birringer), Palgrave Macmillan and Routledge (Broadhurst) and 20<sup>th</sup> Century Music, RMA Journal, Tempo, Ashgate and Oxford University Press (Fox).

A number of staff hold leading positions in professional subject associations and learned societies: Birringer is a board member of dance-tech.net; Fox is a board member of Sound and Music and the National Centre for Early Music; Templeton is Executive Director of the Leslie Scalapino International Prize for Innovative Women Playwrights (2001-present); Wiegold is a member of the British Association of Songwriters and Composers 'Composers Council'; Fox and Nicolls have been jury members for the BASCA and RPS composition awards.

Brunel staff play active roles in developing educational opportunities and maintaining standards within their subject areas. For example, Broadhurst and Fox are members of the AHRC Peer Review College, Fox is a member of REF Sub-Panel 35 and a research project assessor for the Orpheus Institute in Gent. Wiegold is a member of the 'Pulse' steering group, set up by Sound and Music to coordinate composition studies in UK universities. Since 2010 Fox has been composer-mentor for the BBC/NCEM Young Composers Award; Wiegold was composer-mentor for the London Symphony Orchestra's 'Soundhub' in 2012-13 and since 2008 has been a judge for the BBC Young Composers Proms.

All staff are encouraged to share good practice through the examination of doctorates, both as internal and external examiners; since 2008, for example, Birringer has examined at Roehampton, Broadhurst at Goldsmiths, Winchester, Monash (Australia), Dartington College and Trinity Laban, Fox at Anglia Ruskin, Birmingham, Goldsmiths, York, NUI Maynooth, Oxford Brookes, Royal College of Music and Edinburgh Napier, Nicolls at Queens University Belfast, Riley at Royal Holloway, Wiegold at SOAS, Goldsmiths, Canterbury Christchurch, Surrey, Royal Holloway. Many staff have also been invited to work as HEI consultants; HEIs include the Attakkalari Centre for Movement Arts, Bangalore, India; Trans-Media Akademie Dresden-Hellerau; TransNet-Transdisciplinary Network for Performance and Technology, Simon Fraser University.