

Institution: Plymouth University

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

a. Overview

Institutionally, research in this Unit is located in the Research Centre for Humanities, Music and Performing Arts (HuMPA), which is broadly co-extensive with the School of Humanities and Performing Arts in the Faculty of Arts. More locally, our research activity is organised and managed through the following two groupings, which are constituent members of HuMPA: **The Interdisciplinary Centre for Computer Music Research (ICCMR)** and **The Theatre, Dance and Performance Research Group (TDPRG).** Each is convened by a professor, who also sits on the HuMPA management board.

The work of **TDPRG** focuses on embodiment, representation, culture and identity through the making and analysis of performance. The group encompasses researchers of theatre, dance, popular performance, live art and interdisciplinary performance practices, all of whom engage in practice-as-research. Areas of expertise include the body in performance; performance sites, spaces and environments; and performer training. Its many national and international collaborations and partnerships work to celebrate diversity and increase access to performance.

Informed by new computational paradigms and brain sciences, **ICCMR** develops music technology for performance and composition (including therapeutic technology for disability), with often surprising real-world outcomes. ICCMR has gained an international reputation for innovative interdisciplinary research at the crossroads of science, technology and music in the following, often overlapping, areas: biosignal interfacing, evolutionary music, performance and interaction, sound synthesis, composing music with computers, and music neurotechnology. The University has prioritized and consolidated music provision and research since 2008 when, as an undergraduate subject, Music was in the Faculty of Education and the ICCMR was located within the Faculty of Technology; two music researchers were submitted within UoA 63 (Art & Design) to RAE 2008. Since then, the integration of all music researchers in an overarching arts context, along with other performing arts, and university investment in this area, has enabled huge benefits from shared resources, productive dialogues and interdisciplinary opportunities.

The creation of HuMPA in 2009 was a strategic initiative aimed at facilitating this and many of the Unit's other developments. This aligns with Plymouth University's policy to create research centres and institutes to recognise and drive the areas of priority identified in its Research and Innovation Strategy. HuMPA (which, in addition to Music, Dance, Theatre and Performance, includes History and Art History, English and Creative Writing) supports research through its four cross-disciplinary key themes: *Histories, Texts & Cultures; TransAtlantic Exchanges; Lived Experience and Performance* (LEAP); and *Constructing Creative Texts & Scores.* The research centre provides a framework for supporting the career development needs of all research staff and students in these areas. It funds research trips, conference presentation and hosting, as well as specific postdoctoral and postgraduate projects; supports PGR recruitment and completion (both of which are among its Key Performance Indicators); and helps to facilitate a robust, outward-facing culture that aims to reach a wide range of research users.

b. Research strategy

The Unit's general research strategy is 1) to support the practical application of research findings and methodologies, 2) to focus on the continued development of practice-as-research expertise, and 3) to contribute to the development of HuMPA's four themes (above). Our research plan has responded to the key components of the University's Research and Innovation Strategy by investing in the research environment and providing seed-corn funding to attract external investment; supporting cross- and interdisciplinarity; fostering an internationally connected and culturally diverse research environment; and building a critical mass of postgraduate researchers and supervisory capacity. These have been met through the creation of HuMPA, which has planning, funding, and monitoring roles. Enhancing the supervisory experience and development of ECRs is also central to the strategy and, within the Unit, we have ensured that they meet regularly with a named mentor and are allocated to supervisory teams with experienced Directors of Study.

We have sought to develop robust operational infrastructure and support mechanisms. Relating to university-level advisory activities, and the organisation of research bids along RCUK Demand



Management principles, has been the creation of a rigorous internal peer review system for all grant applications. This is further supported both by a dedicated member of the University's Research & Innovation Division and by HuMPA's research consultant, who works with staff at all stages of funding proposals as well as acting as mentor to senior researchers. A school-based workload management scheme has been developed to explicitly account for and value research activity and postgraduate supervision. Our strategy has also begun to address the need for excellent training for doctoral students. In 2011 the University created a Doctoral Training Centre (DTC) in the Arts & Humanities (discussed further below). Its first Director is a member of this Unit (Prof Roberta Mock), who works closely with a School Research Student Co-ordinator (also a Unit member, Dr Lee Miller) to ensure discipline-specific needs are met. We have established three successful MRes programmes (in Theatre & Performance, Dance, and Computer Music) feeding directly into our PhD programme. We have tripled our PGR numbers since 2008, and the majority of these are full time and funded either by the AHRC or University/HuMPA studentships.

Over the past five years, the Unit has concentrated on establishing broad disciplinary commonalities, while strengthening and extending the existing expertise within our two groupings, in order to further develop a supportive, coherent and dynamic research culture for staff and postgraduate students in music, dance, theatre and performance. In so doing, the Unit has also been building upon the main strengths identified by the RAE2008 panel for Unit 65 (Drama, Dance & Performing Arts) – that is, "a research strategy based on a high level of internal collaborative activity and on the cross-fertilization of different established disciplines in order to give a distinctive perspective on performance." The panel also praised the "genuine synergy in some specific creative and research collaborations", and we have continued to prioritise collaboration within research groups and also with academic and non-HE partners, as well as with creative practitioners outside academia. One of the ways in which such a collaborative culture is immediately visible is in the organisation and hosting of many high-profile conferences, symposia, festivals and workshop events.

To fulfil Plymouth's 'University Strategy 2020' (the launch of which included a performance by Unit member, Prof Eduardo Miranda), the Unit aims to develop our research standing and impact internationally by connecting disciplines and communities in novel ways and by continuing to ensure that our research is built on strong ethical foundations. Moving beyond the strategy described above, which has been in place throughout the REF period, our objectives for 2014-2019, therefore, are:

- To develop further collaborative research proposals and projects nationally and internationally with both research stakeholders and other academic departments. The Unit intends, therefore, to play an instrumental role in the formation of a University research institute in the arts and humanities with a particular focus on interdisciplinary initiatives, external income generation and impact-related activities;
- To continue to organise and host innovative and welcoming research conferences with realworld appeal and significance and to use these as the basis for publication in a range of forms (edited journals, books, video, websites, curated events, and so on);
- To further develop and deliver innovative, high quality research training for increased numbers
 of postgraduate students in the performing arts, by working collaboratively with other disciplines
 (e.g. via the Cognition Institute) and institutions (e.g. UWE and University of Falmouth);
- To monitor our current research groupings to ensure they are used to best effect and to reorganise as appropriate in order to support both the needs of individual researchers and the overarching research environment. This will take into account new music researchers (such as Dr Bethany Lowe, appointed Head of Music in October 2013) who do not work in the field of computer music and may include developing a named research group in Lived Experience and Performance, arising from the HuMPA theme;
- To create the optimum conditions for a world-class research environment, and the attendant promotion of public engagement and understanding, in our new £6million Performing Arts Centre (due for completion in 2014).

c. People, including:

i. Staffing strategy and staff development

Our staffing strategy revolves around retention, career development that is sensitive to individual needs, and succession planning. The former relies on the creation of a positive, lively and



stimulating research environment, centred primarily on the activities of ICCMR and TDPRG. This environment is enhanced by Visiting Research Fellows, including Antonino Chiaramonte in Electronic Music Composition, Dr Eila Goldhahn in Authentic Movement and David Oddie MBE in Applied Performance, all of whom extend and complement our research expertise and liaise regularly with a named contact within the Unit. All staff, fellows and postgraduate research students participate in the two research seminar series that are organised within this Unit. Each series meets approximately once per fortnight during term time, usually on the same day as discipline-specific postgraduate research training sessions. There are also numerous opportunities to engage in interdisciplinary research. Matthias is co-convenor of the art + sound Research Group; this is based within the Centre for Media, Art and Design Research (MADr) and also includes other members of the ICCMR. ICCMR is also an associate member of the University's Cognition Institute which serves as an interdisciplinary research hub for leading researchers in the brain, cognition and learning and runs seminars and conferences. Kirke additionally acts as Composer-in-Residence of the University's Marine Institute; for the opening of the Marine Building in 2012 by the Duke of Edinburgh, he turned its wave-tank into a musical instrument.

The convenors of ICCMR and TDPRG work with the Associate Head of School (AHoS) for Performing Arts to support research career progression and leadership development of all staff in the Unit. We operate a confidential mentoring system, with ECRs and new researchers assigned an appropriate mentor on appointment; this is kept separate from appraisal and management processes. All colleagues produce personal 3 and 5 year research plans and have regular discussions with the research group convenors and AHoS, facilitating planning of sabbaticals. internal funding applications and time management. Progress in research is monitored on a termly basis by the relevant research group convenor as well as through a formal annual appraisal system (PDR). High quality research activity is rewarded and acknowledged through promotions processes. Since 2008, there has been one professorial appointment, and four promotions to Associate Professor within the Unit. All research active staff members are encouraged to apply for funding to support their research through HuMPA – as a result, each has obtained funding to attend at least one conference per year, as well as for travel for primary research, reproduction fees, and so on. Professors and Readers also receive research budgets annually from HuMPA, describing the activity this enables (while accounting for expenditure) via publication in a research newsletter circulated to all Faculty of Arts staff.

Since 2010, following School policy, there has one term's sabbatical per year available in each research grouping within the Unit. This has benefitted five individual researchers in the submitted REF Unit so far, enabling them to undertake primary research outside of the UK and to complete major projects. Colleagues engaged in high level research council activity (e.g. chairing grant panels) have this external work accounted for in the School's workload allocation model. This model also ensures that all new staff members receive remission from administrative duties for the purposes of research for one year (extended to 2 years if they are Early Career Researchers). ECRs in their first appointments are required to complete a teaching qualification; within one of their modules, they are able to focus on Research Management. The University is endorsed as compliant with the UK Concordat to Support the Career Development of Researchers and the European Charter for Researchers by the award from the European Commission of the HR Excellence in Research Award in 2011, Bespoke workshops (with themes and topics suggested by previous participants) and regular networking opportunities are provided through both Universitywide and Faculty Research Forum events (the former of which developed from the Early Career Academic Forum and the Contract Researcher Forum). All new PGR supervisors attend a training course led by the Director of the University Graduate School; the DTC additionally runs two refresher sessions for all PhD supervisors each year.

All research managers with responsibility for appointments (including studentships) complete a mandatory 2-day equality & diversity training programme and all other staff complete an on-line module. The Faculty Equality & Diversity Committee, which monitors and reviews equality issues in promotion, recruitment, and research opportunities, includes two members from our Unit (including Benjamin, who chairs the Disability Equality sub-committee). Mock represented the University Graduate Committee on the University Equality & Diversity Committee; she also chairs the Faculty Research Ethics Committee and is a member of the University's Research Ethics Committee.



Members of the Unit are encouraged to engage in public-facing, enterprising and community research through the high profile recognition and prestige of University awards and prizes. ICCMR staff members have received several Vice Chancellor's Enterprise Awards, recognising their contribution to the University and the region: Miranda and Simon Ible, the Director of Peninsula Arts, shared the Enterprising Research Award 2010 for their establishment of the Peninsula Arts Contemporary Music Festival and in the same year, Kirke was awarded the University's Postgraduate Research Student Award. In 2011, Miranda was awarded the VC's World Class Research Award for his contribution to "the outward-facing agenda of the institution."

ii. Research students

There are currently 15 active MPhil/PhD candidates in the Unit, plus two completing post-viva 'minor corrections', split equally between music and theatre, dance and performing arts. In addition to PhD completions, 5 students were awarded MPhils during the REF census period, having submitted for this award in the first instance. Members of this Unit also act as second supervisors for interdisciplinary projects submitted elsewhere (in particular, History and Art & Media). Since 2008, 6 new students have received University or HuMPA studentships (including stipends at RCUK rates) and 7 have been funded by the AHRC via its student-led doctoral and research preparation masters competitions as well as the Collaborative Doctoral Award (CDA) scheme. In a consortium with UWE and Falmouth University, we have been awarded an AHRC BGP (2014-17) to provide practice-led research training in the creative and performing arts.

PGR students are entitled to conference budgets and have taken advantage of more ad hoc initiatives provided by HuMPA such as: competitive funding to undertake primary research; the distribution of netbook computers to all students; and the opportunity to run a student-led conference. Four students in the Unit participated in the 2012 conference which has resulted in an edited collection published by the University of Plymouth Press. Several students participated in Faculty-wide interdisciplinary symposia such as the f-word (2008 and 2009) which focused on cross-disciplinary feminist research. PhD students are also financially supported to present their practical research across the UK and internationally (e.g. Irving in Edinburgh, Liverpool, Utrecht and Strawson in Bali). As a postgraduate research student, Kirke received funding from the University's Beth Levinsky Award to develop his highly acclaimed *Sunlight Symphony*. This sonification of a building using light sensors premiered at the Peninsula Arts Contemporary Music Festival, attracted the attention of the national and international media and was awarded a Media and Innovation Award 2011 by the University in association with the Creative Industries iNet.

Student progress is monitored through a range of processes including staged milestones, a robust Annual Programme Review process and an online Research Student Tracking system, Research skills and career development training in the arts & humanities is developed, managed and provided by the DTC, which offers over 30 hours of workshops each year. DTC activities have been designed to complement the discipline-specific research skills training sessions that are offered by both ICCMR and TDPRG as well as the University Graduate School's generic training provision which, in 2011, was ranked first overall out of 35 universities in the International Student Barometer survey run by an independent research agency. This provision forms the basis of a 60 credit module entitled 'Research Skills in the Arts & Humanities' which is fully articulated to VITAE's Research Development Framework. Wherever appropriate, the Unit facilitates undergraduate teaching opportunities for postgraduate research students, all of whom are encouraged and entitled to undertake an accredited Graduate Teaching Associate course. We also strive to enable postdoctoral progression. Two members of the Unit have completed their PhDs since 2008: Kirke was immediately employed as a Research Fellow; Smith, who already had a senior research post prior to his receipt of a full time studentship, was promoted to Associate Professor (Reader) upon completion. Two current ECRs in the Unit are being supported to begin PhD programmes in 2013.

We are committed to fostering best practice in subject-specific research methodology training. This is evidenced in contributions by Miller and Mock to books such as *Practice-as-research in performance and screen* (2009); *Blood, Sweat and Theory* (2010); and *Research Methods in Theatre & Performance* (2011). Mock presented a paper on the challenges and opportunities of practice-based doctorates to the UKGrad annual conference (2009); Miller co-presented a keynote at Manchester Metropolitan University's PARC (Practice as Research Consortium) NW event in



2011. To facilitate postgraduate practice-as-research, we run a series of training events focusing on documentation, embodied knowledges and situated cognition; students are encouraged to participate in regular 'scratch' nights; they have technical and resourcing support; and we remain flexible and open-minded about supervisory requirements as well as the presentation of theses in 'non-traditional' forms.

d. Income, infrastructure and facilities

In addition to the funding provided by HuMPA to undertake research, there are a number of University schemes designed to seed innovative research initiatives. For instance, Matthias, Miranda and colleagues in MADr were awarded a Proof of Concept Award by the University in order to develop the Neurogranular Sampler project, which subsequently secured funding from ACE and the PRS Foundation New Music Award for specific arts applications (£50000). Matthias is also Co-Investigator of the €4.1 million EU Marie Curie Innovative Doctoral Programme Award, 'CogNovo' (2013-17) which is investigating and fostering research training in the field of cognitive innovation with 24 international partner organisations; at least 4 members of the Unit are members of CogNovo supervisory teams.

The Unit has been awarded external funding by the EU Lifelong Learning Programme for a project entitled "Electronic Music & Use of ICT for Young at Risk of Exclusion" (\in 412,280 in total) and an EPSRC grant for research on Brain Computer Interfaces (BCI) and Emotion (£431,453 in total). An AHRC-funded Collaborative Doctorate, "Performing LGBT Pride in Plymouth, 1950-2000" (awarded 2011) has developed into a more wide ranging productive relationship with our partners, Plymouth Pride Forum and Plymouth & West Devon Record Office, resulting in a Heritage Lottery Funded Research Assistant post (2011-12). Matthews has been awarded an AHRC ECR Fellowship for a project entitled "Anatomy of Performance Training" (£110,500, 2013-14). TDPRG is the co-organiser of a EU-funded (Culture Programme, Strand 1.2.1) project with partners in Greece, Spain and Turkey, entitled *Heaven on Earth?*, which will result in the making of a dancefilm and series of site-specific performances inspired by the work of Jean Genet (\in 200,000, 2013-14). Smith's practice-as-research performances have been funded by ACE, Exeter Arts Council, the National Trust, Torbay Council, Kaleider and Esmee Fairbairn Foundation.

We fully utilize the facilities in the iconic Roland Levinsky Building, at the heart of the university campus, which include three studio spaces, a cinema, a theatre and a large public atrium in which performances take place. We work with four dedicated technicians (each with specialist expertise in lighting, digital technologies or sound) and a Technical Manager for Performing Arts. ICCMR runs a well-resourced research laboratory which houses staff, postdoctoral fellows, post-docs, PhD and MRes students, creating a stimulating environment for collaborative research. The laboratory houses 12 computer workstations appropriately configured for research into music technology, a number of electronic music instruments and alternative music controllers, some of which were developed in-house. ICCMR also runs a state of the art Brain-Computer Interface laboratory, with EEG (brain scanning) equipment and robots. The laboratory was built with financial resources yielded by research grants from EPSRC, EU and Leverhulme Trust since 2005. Music rehearsal rooms are also available on campus. The Seale Hayne Library has substantial print and online resources; Performing Arts have a dedicated subject specialist, are allocated £8000 per year for the purchase of resources and benefit from unlimited interlibrary loans. A new dedicated Performing Arts Centre on campus (to be completed 2014), reflecting the University's ongoing commitment to both teaching and research in theatre, dance and music, features a flexible theatre space, and will become home to the ICCMR laboratories as well as three rehearsal studios for theatre, dance and music, and offices for staff members in the Unit. This will supplement the facilities already available in the Roland Levinsky Building.

One of the main ways we develop and sustain relationships with research users is by working with Peninsula Arts, the University's cultural programming organisation, through which practical research is presented to local, regional and national audiences. New work by staff and PGR students has premiered at the annual Peninsula Arts Contemporary Music Festival and through regular theatre, dance, film and live art programming. For instance, Benjamin has performed or presented choreographed work with collaborators such as Kirstie Simson, Kenzo Kusuda, Jordi Cortés, 5 Men Dancing, and Russell Maliphant. Ladron de Guevara performed his theatre piece, *Time Zones*, in the Peninsula Arts programme and in Mexico (2011); The Unit curated a Dance on



Screen season in 2012 and members frequently introduce film screenings and chair post-show discussions. We are supported in these activities by the Peninsula Arts Film Administrator, who liaises with distributors, and organises projection and publicity. Peninsula Arts also provides the opportunity for researchers in ICCMR and TDPRG to collaborate together (e.g. Matthias' and Benjamin's improvised performance, *We'll See What Happens; You'll See What Happens*, 2013).

e. Collaboration and contribution to the discipline or research base

ICCMR is unique in the way it converts scientific research outcomes into real world applications through practice-based arts research. During the REF period, it has collaborated *internationally* on interdisciplinary research projects with (a) University of Amsterdam, Hungarian Academy of Sciences, Universitat Pompeu Fabra (Spain), Liverpool Chamber of Commerce, Centre for Innovation and Development in Education (Romania) on EU-funded projects and (b) University College London, Leibniz Institute of Neurobiology (Germany), Johannes Kepler Univesity (Austria) on an EPSRC-funded project. Established agreements are in place with universities in France and Austria to welcome students at ICCMR for 3 months placement periods, often resulting in joint publications and conference presentations. An on-going collaboration with UFRGS University in Brazil led to the publication of a special issue of the *Journal of Brazilian Computer Society* (2008). Current *national* collaborators include University of Essex's Biomedical Engineering Department, University of Reading's Cybernetic Department, Royal Hospital for Neuro-disability (London), and University of Leicester's Cell Physiology and Pharmacology Department. Miranda is an Associate Member of the Creativity and Cognition Studios, University of Technology, Sidney, Australia and a Research Fellow of the Staatliches Institut für Musikforschung in Germany.

As a unit in a strong research university, TDPRG participates in national and international networks of researchers and practitioners in a discipline-specific context. Mock was an elected member of the TaPRA executive committee (2007-12) and one of the judges of its ECR and David Bradby Prizes for Research (2012). Ladron de Guevara is an elected executive member of SCUDD (Standing Conference of University Drama Departments). All members engage in practice-as-research, and the group champions the value of rigorous reflexive practice and embodied knowledges at all levels of a research career, especially in interdisciplinary areas that stretch our understandings and expectations of performance and discrete genres.

As a whole, the Unit develops and sustains relationships with other partners by hosting coorganised events such as, (a) Music, Science and the Brain symposium (2008), with the Centre for Theoretical and Computational Neuroscience at Plymouth University; (b) the Hidden City Symposium (2008), which focused on new writing, urbanity and site specific practices and was scheduled to align with the Hidden City Festival organised by Part Exchange Co. (c) Music Technology in Education for the Young at Risk of Social Exclusion (2010) with the Association for Culture, Sport and Leisure (Italy) and Liverpool Chamber of Commerce; (d) Aesthetic Decision in Computer Aided Composition (2010) with PRISMA (Pedagogia e Ricerca Internazionale sui Sistemi Musicali Assistiti), which resulted in a special issue of *Contemporary Music Review* (28:3); (e) The Live Laboratory Symposium (2010), co-organized with Plymouth Arts Centre and the Marina Abramovic Institute, with staff members contributing to the book, Marina Abramovic and the Future of Performance Art (Prestel, 2010); (f) ARROW (Art: A Resource for Reconciliation Over the World) symposium (2010) with the Indra Congress (International Development of Reconciliation through the Arts), including practitioners from India, Serbia, the West Bank, South Africa and Sierra Leone; (g) NeuroArts Workshop (2011) co-organised with UK Mathematical Neuroscience Network; (h) the 2nd International Research Forum on Guided Tours, co-organised with colleagues from Halmstad and Gothenburg Universities (2011); and (i) a symposium on cultural identity in performance, race and integration to coincide with the Plymouth Mela (2012). Additionally, members of the Unit organised and hosted the annual Theatre & Performance Research Association (TaPRA) conference (2009); NeuroArts 3: Noise conference (2012); and the Zombies: Walking, Eating and Performance symposium (2013). These conferences in Plymouth share an emphasis on engendering research dialogue between academics and individuals and groups who operate outside the academy, including therapists and teachers, performance artists and storytellers, curators and tour guides, film-makers and composers. Since 2008, Unit members have also acted as Programme Committee members or paper reviewers for 35 international conferences that have taken place in Brazil, the United States, Canada, Italy, Australia, Portugal and Germany.



We contribute to our disciplinary communities in a variety of ways, including through research council activity. Miranda is a member of the peer review colleges of EPSRC, the Danish Council for Strategic Research and the Austrian Science Fund (FWF), and has reviewed proposals for the Research Grants Council of Hong Kong. Mock is a member of the AHRC Peer Review College and, since 2008, has been a member of four AHRC panels and has chaired two. In 2013, she was keynote speaker at three AHRC Knowledge Exchange workshops for research managers. Unit members have acted as PhD external examiners for more than 20 UK universities since 2008. Mock is also the first external examiner for the taught elements of the University of Winchester's Doctor of Creative Arts: Performing Arts programme.

We also serve on the editorial advisory boards of a range of peer-reviewed journals, including South African Dance Journal; Choreographic Practices; Theatre, Dance and Performance Training; Dancelines, a sub-section of Research in Dance Education; Leonardo Music Journal; New Sound; Journal of Sonic Studies; Radical Musicology; and Contemporary Music Review. For the latter, Miranda edited two special issues in 2009 on Aesthetic Decisions in Computer-Aided Composition and Exploring Music through Neuroscience; he is also Regional Editor of Organised Sound. Mock is editor of Intellect Book's Playtext series (with eleven new volumes since 2008).

Members of the Unit are often invited to perform at high profile and prestigious venues. On an *international* level, for example, Matthias performed live at The SXSW Festival (Austin, Texas 2009), Le Poisson Rouge and The Living Room (both New York City, 2009); a selection of Miranda's compositions for piano and electronics were performed in a portrait concert dedicated to his music held at the prestigious Cankarjev Don in Slovenia (2010). Postgraduate students and research fellows often perform the outcomes of their research worldwide; e.g. Chiaramonte (Rome), Rutz (Graz), Eaton (Berlin), Votava (Finland) and Strawson (Singapore). Benjamin has choreographed for Croi Glan Integrated Dance Company (Ireland) and has performed in Switzerland, Germany and Japan. Smith has acted as dramaturg or co-adaptor for six productions by TNT Theatre/American Drama Group Europe (Munich), each of which has toured internationally (including to China). Way's *Blind Torrent* was screened at the 2013 Dance on Camera Festival (Lincoln Center, New York). Bessell was nominated in the best international album category in the Schallwelle Electronic Music Awards for his CD *Morphogenic* (DiN, 2012), made with Bakis Sirros (aka Parallel Worlds).

On a *national* level, Miranda performed as soloist with the BBC Concert Orchestra, for the premiere of his *Sacra Conversazione* at Electronica III (South Bank, London, 2011), presented by Jarvis Cocker. In the same year, he composed *Mozart Reloaded* for BBC Concert Orchestra and BBC Radio 3, which features compositional methods developed from research on "recombinant music" developed by Miranda with his PhD students, whose work also featured on the programme on which it premiered. TDPRG members have either performed or had their work performed at Sadler's Wells, The Place, Shunt and Theatre 503 (all London), Dartington Hall and the Bike Shed (Exeter). Smith, who is a founding member of site-based performance company Wrights & Sites, has had collaborative performance projects commissioned by Aune Heads Arts, the National Trust and Spacex Gallery (Exeter). The Fragmented Orchestra by Matthias (with Jane Grant and Nick Ryan) was installed simultaneously at FACT gallery (Liverpool) and 23 other locations across the UK (including the Bronte Museum, Everton Football Club, the Centre for Alternative Technology in Wales and Brighton's West Pier). It won a Prix Ars Electronica Award and the Wellcome Trust Engaging People Award (both 2009); Matthias was also nominated for the Times Higher Education Award 2008 for Excellence and Innovation in the Arts (Highly Commended), sponsored by ACE.

International keynotes, research papers and workshops include: ImPulsTanz Vienna International Dance Festival; Metropolis Laboratory, Copenhagen; Royal Asiatic Society, Kolkata; Lisbon and Windsor (Canada) and Tottori (Japan) Universities; EarZoom Sonic Arts Festival, Slovenia, 2010; *Art, Brain and Language Symposium*, Portugal, 2008; and *First International Symposium on Applied Sciences in Biomedical and Communication Technologies*, Denmark, 2008. We have been invited to present our research *nationally* at over 20 universities as well as at B-side Multimedia Arts Festival, 2013; *UK Brain-Computer Interface Network Meeting*, 2009; *Man Made*, Science Museum, London, 2009; *Sonic Imagery Symposium*, 2008; *International Music Computing Research Workshop 2008*; and the Royal Institution of Great Britain (Matthias, 2011; Kirke, 2013).