

Lloyd Russell



Open minds

The areas where science meets music can be interesting for both sides. *Andrew Stewart* looks at a groundbreaking collaboration in Cheltenham where the interest extends to substantial financial support

Time will tell if the growing need for new sources of arts funding proves the mother of creative invention. This year's Cheltenham Music Festival (2-17 July) certainly offers encouraging signs that fresh programming approaches can deliver viable partnerships with funders ostensibly beyond the reach of arts organisations. The Wellcome Trust, whose global charitable mission concerns the improvement of human and animal health, heads the list of donors to Cheltenham's 2010 programme budget by a substantial margin. The impressive deal reflects the coincidence of an arts festival's positive response to recessionary times and the science establishment's strategic investment in public understanding of the things scientists study.

Wellcome money powerfully underpins the festival's Sound Mind strand, five events devoted to the neuroscience of music to complement the

anniversaries of Schumann, Wolf and Gesualdo, and which have clearly been compiled for minds curious and open. It has also funded the creation of two works presented in Cheltenham: Michael Zev Gordon's *Allele*, a work for 40-part unaccompanied choir based on material from the genomes of each singer involved in its creation; and *The Lion's Face*, an opera by Elena Langer exploring memory and dementia developed in tandem with the department of psychiatry at Kings College London.

Sound Mind opens on 4 July with a discussion of music's therapeutic potential. It continues with investigations for everything from the 'Sound of Melancholy' with Professor Robert Winston and broadcaster Stephen Johnson to the impression left by neurosyphilis on 19th century music. The series has been co-curated by Cheltenham Music Festival's artistic director, Meurig Bowen, and Professor Ray Tallis, humanist philosopher, poet, novelist, retired

doctor and full-time polymath.

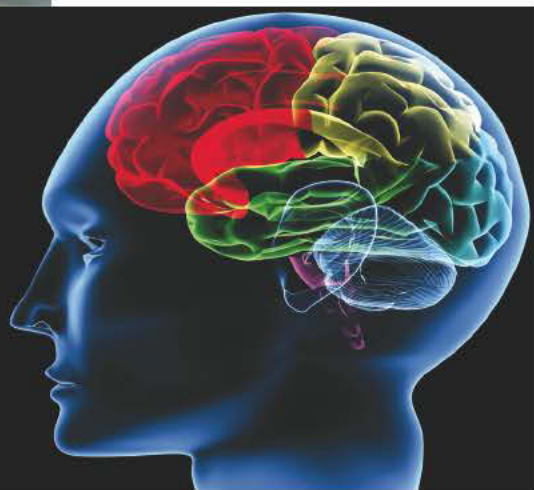
While a festival director could be forgiven for keeping mum about under-explored funding opportunities, Meurig Bowen prefers to spotlight the Wellcome Trust's investment in his festival and predict the growth of future collaborations between the arts and sciences. 'I guess it's like the dilemma of travel journalists writing about a beautiful, completely undiscovered island which everybody then wants to visit! Some might be tempted to keep this quiet in one way, but the Wellcome Trust deserves the widest credit for its part in helping us realise our programme this year.'

Cheltenham Music Festival, he adds, is seriously committed to exploring the creative possibilities of science and music, not least thanks to the inspiration of its younger sibling, the Cheltenham Science Festival.

'Sound Mind has grown out of the very deep relationship developed between the Wellcome



Polymath: Ray Tallis

Left: Creative partnership:
Eduardo Miranda

Trust and the Science Festival over the last few years,' Bowen comments. 'Cheltenham Science Festival's growth, from fairly modest beginnings in 2002, is extraordinary. They've just smashed their box-office target by around 25%, and the ingenuity with which they've created a new genre of festival in so few years is inspiring. The Science Festival's business is about engaging the experts with the public and vice versa. It's an extraordinary thing.

'Being close to the Science Festival has really helped shape the way Ray Tallis and I developed the Sound Mind series.'

Cheltenham's collective of festivals has presented Bowen with rare opportunities to learn from observing how his science, literature and jazz festival colleagues variously address programming and funding challenges. All of us in the classical music world are now having to look hard at who and what we are and more generally at rethinking ideas about classical

music presentation. We're an incredibly resourceful and imaginative bunch in the UK arts scene – we have to be. But those of us working in classical music can certainly learn by looking at what colleagues are doing in other arts genres.'

The scientific seeds of Bowen's forthcoming Cheltenham programme were planted well before national and local government funding cuts became the stuff of daily news. He admits, however, that his pursuit of science funds could be seen as opportunist. 'There's a thin line between opportunism and spotting a developing trend before it really takes off. It's an amazing coincidence that this year's Aldeburgh Festival has a Music and the Brain strand too. All I can say is that we're determined to go on developing programme themes in which music and science are drawn together.'

That determination was no doubt strengthened following the decision of what Bowen refers to as 'two leading music charities – Cheltenham regulars' not to support this year's programme. 'We were in discussion with Wellcome well before we learned those two trusts were not going to deliver. We've simply had to cast our funding net much wider in the last couple of years, because the "old order" of funding structures simply cannot be relied upon in this current climate.'

Science played an important role in preserving Cheltenham Music Festival's connection with aircraft landing gear manufacturers Messier-Dowty, corporate supporters of the event since 1947. The company recently decided to shift its annual sponsorship commitment to the Cheltenham Science Festival. 'Their has to be one of the world's longest commercial sponsorships of classical music,' says Meurig Bowen. 'They felt the Science Festival made a better strategic fit for them. My development manager cleverly proposed a hybrid event as part of this year's Science Festival which enabled us still to receive a share of Messier-Dowty's sponsorship.'

Bowen curated the project, inviting David Owen-Norris to present a lecture recital dealing with the piano's technological development. 'He demonstrated everything from his own 1781 square piano to the Fazioli grand in the new Parabola Arts Centre at Cheltenham Ladies College. It was a hugely engaging fusion of technology and music, and created something so successful and genre-bending out of funding exigencies.'

Eduardo Miranda, professor of computer music at the University of Plymouth's Interdisciplinary Centre for Computer Music Research, welcomes any widening of opportunities for creative partnerships between the arts and sciences. He cites the example of his latest composition, *Mind Pieces*, set to receive its premiere next February during the Peninsula Arts Contemporary Music Festival in Plymouth. The orchestral work, commissioned by the university-funded festival, is based on musical material generated using A-life (or Artificial Life) computational modelling techniques. 'In a nutshell such techniques allow computer scientists and biologists to team up to build models to

study living systems,' Miranda explains.

'I am using a particular class of A-life techniques known as Cellular Automata (CA) to compose music. I've already created several works using CA and am using an A-life Cellular Automata model to generate movements two and four of *Mind Pieces*. This CA models the way in which information travels through networks of neurons in the brain.' He adds that his new score's remaining three movements will be composed 'by hand', drawing inspiration from brain functioning. 'I'm particularly inspired by the phenomenon of memory retrieval by the brain and how our memory often distorts information.'

Miranda is adamant that any composer or arts promoter looking to science for inspiration and funding should be sure to consider providing science with something in return. 'Creative artists might frame a musical project in ways in which its outcomes, as it were, could help scientists to understand something more clearly,' he observes. 'They could then turn to science councils and other scientific research funding bodies for possible support. If a composer can find ways to say that a piece, by using elements based on science, will foster public understanding of scientific work, then it has a chance of attracting funding. The Wellcome Trust arts awards are the best model we have in the UK for this sort of funding, even though they're extremely competitive and not easy to secure. What we need, I think, is to open the minds of other trusts and councils to cross-disciplinary creative partnerships.'

The mind-opening process, Eduardo Miranda continues, already promises to deliver fresh funding sources for collaboration between the arts and sciences. He suggests that the Physical Sciences Research Council, for example, might prove open to innovative proposals bearing an arts component. 'They're definitely interested in promoting public understanding of the sciences. Although they don't mention art among their aims, they do fund people who are able to write and lecture about science and connect with the public. I think that's where the arts in general and music in particular can really help make difficult scientific ideas more understandable.'

'The culture is certainly changing and I believe the issue of the public understanding of science is going to become increasingly important. Scientists don't communicate very well with the public because their language is so specialist. But if you have proxies in the form of composers or artists who can help scientists interact with the public, it's possible to make complex ideas more approachable and open windows into science.'

<http://cheltenhamfestivals.com>

