THE ART AND CONSEQUENCE OF COLLABORATION
4-26 OCTOBER 2018
SASA GALLERY
Spectra 2018 is Australia’s pre-eminent art/science gathering showcasing the best research and creative work being produced through interdisciplinary collaborations between Australian and New Zealand artists and scientists.

Spectra 2018 explores the increasing convergence of art and science and considers how each area impacts the other and how, together, they shed light on who we are and where we’re heading. Taking place in Adelaide, South Australia, the inaugural Spectra will comprise three-day symposium presenting collaborative research, an exhibition showcasing research outcomes, and a compelling public program of screenings, talks, performances and special events.

Spectra 2018 is proudly presented by the Australian Network for Art and Technology (ANAT), with partners the University of South Australia and Experimenta Media Arts, in association with colleagues drawn from the arts and science sectors, and with generous additional support provided by Arts South Australia.

The Australian Network for Art & Technology (ANAT) began life in Adelaide in 1988 and, since then, has created opportunities for Australian artists to work with scientists and researchers and introduced them to emerging technologies with creative potential.

ANAT does today what others think about doing tomorrow. It was first in Australia to test the creative potential of mobile devices, wearables, and real-time data, among many other technologies. As an early adopter, ANAT sees the horizon, and identifies and pursues opportunities to demonstrate the transformative power of the arts, often in non-arts settings.

20 years ago ANAT presented its first art/science residencies, eventually leading to the establishment of the Synapze program in 2004. Over that time, more than a hundred artists and scientists have participated in ANAT’s residencies, cementing its reputation as a leader in the field.

Australian artists have long been at the forefront of art and technology movements internationally; it is now time to celebrate Australian artists’ equally important and influential work across the arts and sciences. By showcasing the work of those at the vanguard of art/science, Spectra 2018 leads and inspires from the cutting-edge, shedding light on who we are, where we are, and where we’re going.

Established in 1986 by experimental film and video makers, Experimenta has been instrumental in the development of Australian media art from an underground cultural phenomenon to a celebrated form recognised by major cultural institutions, and growing in scope and sophistication. Melbourne based, with a national and global reach, Experimenta commissions, presents and advocates for Australian artists. Through our research, education and development programs, Experimenta deepens engagement with our existing audiences and builds new audiences and markets for media art, increasing the capacity of the cultural sector. To date, Experimenta has presented seven editions of its major national touring exhibition of media art - the only international biennial to tour Australia and present technology-driven art to diverse audiences across the country. Alongside this program, Experimenta has presented countless exhibitions, large-scale projects, site-specific interventions, screenings, performances, education projects, and international exchanges. Experimenta is currently touring Experimenta Make Sense: International Triennial of Media Art around Australian until 2020.
THE ART AND CONSEQUENCE OF COLLABORATION by Jonathan Parsons

The Art and Consequence of Collaboration presents eleven Australian artists who courageously cross boundaries by deeply engaging with the sciences, resulting in an extraordinarily vibrant and diverse array of artworks. Their research not only impacts on their own artistic practices, it has opened up new horizons for the scientists they have worked with. This is where the potency of arts science collaboration lies: in its ability to spark new ideas, provide critical perspectives on some of the great questions of our time, and develop new forms of expression that speak to the sophisticated technological era we live in.

Australia continues to be fertile ground for art science investigations and collaboration. This is perhaps not surprising given that its very colonisation was the unintended (at least publicly) consequence of the search for new scientific knowledge via Cook’s expedition to the Pacific to observe the transit of Venus. In Martin Walch’s Terrestrial Antarctic, the result of a recent residency at the Mawson Station in Antarctica, he shows a keen interest in observing a little known aspect of the natural world, like the artists and scientists aboard the Endeavour. Leah Birdsey’s Migration Patterns: From Fireweed to Saltwater brings this same observational rigor to explore an equally unfamiliar environment, our aqua sphere. David Haines’ Swole Foot Mountains appeals to the executive power of our olfactory senses, triggering lived and ancestral memories of our connections to the earth.

Robert Andrew scrutinises the earth we tread in his work Country, Land, Soil and Space, reminding us that while the pursuit of objective truth is central to Western science, it cannot be dissociated from the particular social, cultural and political contexts within which it occurs. Furthermore, Andrew’s work is a commentary on how markedly different the Western separation of artistic and scientific knowledge systems is to the holistic Australian Indigenous approach to knowledge. Keith Armstrong’s work Into State brings another cultural view. By drawing on Eastern philosophy to problematise the rigid categorisations and linear thinking of the periodic table, Armitage suggests that new approaches are required if we are to tackle environmental issues. Just as scientific practice is influenced by its cultural context, Helen Pynor’s video work documenting the hand gestures of Dr Sulevcki whilst discussing her research reminds us that scientists bring human feelings and passion to their work.

Accompanying this work is Pyron’s Fallen, part of an extended exploration into the ambiguity of life’s beginnings and endings.

Many of the artists utilise scientific research and new technological tools to reconnect people to the reality of the physical world. By studying the growth of lichen in the forests of the Blue Mountains World Heritage Area, Joyce Haeberli considers how the adaptations of lichen might present new opportunities for biomimicry. Chris Henschke is fascinated by the underlying patterns of the universe explored in the field of physics. Inspired by his residency at CERN, his work Resonance gives visual expression to a phenomenon seen at both the microscopic and macroscopic scale. Erica Seccombe’s Out of Sequence has utilised advances in microscopic scanning technologies to reveal the wonder of natural processes impossible to see with the naked eye.

Baden Pilkington’s Canger gives expression to the massive data sets extracted from players in an AFL game and transforms them into digital sculptures. By personalising medical devices in her work Patient, Leah Heiss demonstrates the transformative power in uniting aesthetics with functionality to challenge the norms of the health sciences.

The works in this exhibition traverse many scientific disciplines and are realised in many artistic forms. Most significantly, they offer a vital antidote to Stephen Wilson’s warning in his seminal book ‘Art + Science: Now’ that “the partitioning of society, inquiry and knowledge into specialized compartments is a recipe for cultural stagnation.”

Jonathan Parsons
Artistic Director, EXPERIMENTA
Curator, The Art and Consequence of Collaboration

Keith Armstrong | Inter-State, 2016

Inter-State embodies ‘re-futuring’ practices by integrating concepts of art, science and futurist thinking through two related works: a large-scale backlit print depicting a re-imagined scientific periodic table of elements, and a scientifically-arcane microphone viewer and headphone soundgraph. Viewers can examine the imagery as a whole, or in forensic close-up, by instigating slow scans across groups of elements on the microphone reader.

Inter-State re-conceptualises the ‘periodic table’ as a relational mesh of forms, contrasting its elemental reduction and tabular characteristics with Wu Xing’s circular, interrelated five phases and their ‘generating’ and ‘overcoming’ relationships. The table becomes a deeply related collection of codes, quotes, thoughts and pictorial impressions of non-linear processes and philosophies, inspired by Tony Fry’s deeply relational re-futuring theories. The 100% vintage reader draws attention to the ‘necessary utopias’ that permeate contemporary design thinking.

The soundtrack’s five passages are inspired by the Wu Xing’s ‘generative’ cycle of Wood–Fire–Earth–Metal–Water. Each involves the sonification of a group of elements from the original periodic table, using their atomic numbers to control an audio synthesis process that morphs into a ‘noisy sound cloud’, thereby controlling energies within a frequency band defined by the group’s atomic numbers.

Keith Armstrong is an experimental artist profoundly motivated by issues of social and ecological justice. His engaged, participative practices provoke audiences to comprehend, envisage and imagine collective pathways towards sustainable futures. For over twenty years he has specialised in collaborative, experimental practices with emphasis upon innovative performance forms, on-site electronic arts, networked interactive installations, alternative interfaces, art-science collaborations and socially and ecologically engaged practices.

Keith’s research asks how insights drawn from scientific and philosophical ecologies can help us to better invent and direct experimental art forms, by understanding that art practitioners are powerful change agents, provocateurs and social catalysts. Through inventing radical research methodologies and processes he has led and created over sixty major art works and process-based projects, which have been shown extensively in Australia and overseas, and supported by numerous grants from the public and private sectors.