

# **REVOLVE *from dusk to dawn***

**a multimedia performance inspired by sleep science**

*What wakes you and what keeps you awake?*

REVOLVE sheds light on the 'stuff' dreams are made of, the night-stories and bodily states that shape our sleeping hours. This intimate work invites audiences to experience a series of states enfolding voice, sound, light, video and dance, as the performer traces the path of the sleeper's mind and body from dusk to dawn. Driven by a curiosity about the body, its rhythms and potential for change, the work alludes to the planetary, physiological and personal cycles that round our lives.

## **About the Performance**

The *REVOLVE* performance system involves wearable electronic sensor technology and an interactive sound environment. Sensing the body, its gestures and its environment through the measurement of light, tilt and acceleration, the "sensor suit" allows the performer to intuitively control and interact with a malleable sound environment. She can respond to this environment by choosing to expose or hide light-sensitive parts of her body and by combining these actions with movements of varied speed. In turn, the sonic feedback influences the emerging choreographic score, inducing constraints and generative cyclic patterns for movement.

The dramaturgy is driven by concepts based on the physiological cycles that underlie sleeping and waking, which are driven by our circadian biological clock that keeps our sleep/wake cycle coordinated with the rotation of the earth. *REVOLVE* includes scenes that are inspired by states such as light sleep – delving in and out of wakefulness; deep sleep – a state in which the brain's neuronal activity synchs up to create very slow and large brainwaves; and REM sleep – a state characterised by nervous muscle twitches and rapid eye movements that come from an active, but sleeping brain. At the end of the performance there is a metaphorical breach into waking consciousness as the brain re-engages with the external world through purposeful and directed movement.

The sound design is partially composed, and partially interactive. The composed sounds are sourced from EEG brainwaves, recordings of a sleeping child and the voice of tenor Keith Lewis. The interactive sounds are based on the auditory beat, a phenomenon that arises when two pure tones of different, but neighbouring frequencies are played together. In such a situation, a beat frequency emerges, perceived as a periodic pulsing of the sound. These beats – waves of sound - are powerful to listen to, physically moving, subsonic but clearly perceivable.

## **Credits**

Conceived by Anne Niemetz and Carol Brown

Sound composition: Russell Scoones

Choreography: Carol Brown

Sleep Scientist: Philippa Gander

Lighting design: Margie Medlin

Wearable electronics, media design and interactive sound: Anne Niemetz

Assistant interactive designer: Kenny Smith

Costume design: Christina Houghton

Texts: Carol Brown, Alys Longley and Fiona Graham

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For more information about Revolve, see [www.adime.de/revolve](http://www.adime.de/revolve)

## **Biographies**

**Carol Brown** has over twenty years experience performing, choreographing and teaching internationally. Currently Senior Lecturer in Dance Studies at the University of Auckland, her work evolves through collaborative research with artists and scholars from other disciplines, in particular architecture, music and media design. Recent works include *Tongues of Stone* (Perth Dancing City); *Mnemosyne* (Prague Quadrenniale) and *Slip* (Touch Compass Dance Company). Currently, she is choreographing *SEED* for Subcircle in Philadelphia and *Maybe* is touring the UK with Bare Bones. Formerly choreographer in residence at the Place Theatre, London Carol Brown's works have received numerous awards including a Jerwood Award for Choreography. Originally from Dunedin, Carol last performed in Christchurch with Smith vs Smith's during their South Island Tour in 1991.  
[www.carolbrowndances.com](http://www.carolbrowndances.com)

**Philippa Gander** is currently the director of the Sleep/Wake Research Centre at Massey University. Philippa started her academic career as a zoology student at the University of Auckland, where she was introduced to chronobiology (the study of biological timing mechanisms) in her second year. Having completed her doctorate, she left New Zealand in 1980 to work at Harvard Medical School in Boston as a Senior Fulbright Fellow. In 1983, she moved to the NASA Ames Research Centre in California where she joined the Flight Crew Fatigue and Jet-Lag Program, subsequently, the Fatigue Countermeasures Program. During her time at Harvard and NASA Philippa developed an abiding fascination with sleep research. Over the years, much of her work has focused on the effects of the 24/7 society on sleep and the circadian clock, and the consequences for health and safety. In the last 10 years, in collaboration with Te Ropu Rangahau Hauora a Eru Pomare and the Wellsleep Clinic at the Wellington School of Medicine and Health Sciences, Philippa has also worked on research investigating how many people in New Zealand have sleep disorders, and which groups are most at risk. The main aim of this work is to provide a strong evidence base to improve health services for New Zealanders suffering from sleep disorders.

**Margie Medlin** is an artist and cultural curator working in the field of dance and the moving image. For 20 years she has designed lighting for live works and produced combinations of film and video works, scenographies and new media art works. As a producer and director of dance films and video works most recent credits include the film of *SWIFT* in collaboration with choreographer Ros Warby and *Morphing Physiology* a documentary about the Quartet Project. Margie was artist in Residence at the ZKM Institute for Art and Media, Germany (1999-2001) where she produced the media installation "Miss World". In 2005 she received a Science and Art production award from the Wellcome Trust in London. Margie became the director of Critical Path, Sydney, Australia's choreographic research centre in August 2007

where she continues to create innovative platforms for creative actions within and between art forms.

[www.criticalpath.org.au](http://www.criticalpath.org.au)

**Anne Niemetz** is a media artist and designer working with video, audio, installation and physical computing. She is particularly fascinated by the convergence of art, science, design and technology, and she pursues collaborative and cross-disciplinary projects.

Anne holds a Media Arts degree from the Staatliche Hochschule für Gestaltung Karlsruhe, with a focus in digital media and interactive sound installation, and an MFA in Design | Media Arts from the University of California Los Angeles. In 2007 she moved to New Zealand, where she holds the position of Senior Lecturer in the Media Design programme at Victoria University of Wellington.

[www.adime.de](http://www.adime.de)

**Russell Scoones.** Russell's sound designs are often created from the environments, locations and rhythms of the concepts of the performance. For REVOLVE he has included recordings of brainwaves during sleep, his child's sleeping breath and the voices of sleep scientists. In 2011 he composed a sound score for headphones for the guided street performance *Tongues of Stone* in Perth, Australia. For the 2006 Wellington International Festival of the Arts he composed the score for Carol Brown's Aarero Stone, using stone, metal, glass and wood. SLIP (2010) was composed for Auckland's Touch Compass Dance Company using text and song to unravel the stories of the performers. Dunedin born, Russell recently returned to New Zealand after many years in London where his collaborations with the prize winning Carol Brown Dances saw and heard Russell's compositions performed throughout the world in festivals, theatres, film and TV. He works as a music therapist at the Raukatauri Music Therapy Centre and performs and writes songs for indie folk rock band The Verandahs.

[www.russellscoomesmusic.com](http://www.russellscoomesmusic.com)