Interesting things occur at the edges of fields expertise

Material Beliefs pairs experienced research engineers and designers through a residency program. The aim of these reflective collaborations is to generate a body of work for public exhibition and engagement events. These events will open up a reflective and critical space around the role of future technology, in which the engineers' research can be represented to the public in a novel ways. Wednesday 18 April 10am The Women's Library London Metropolitan University Old Castle Street London E1 7NT

info@materialbeliefs.com www.materialbeliefs.com Material Beliefs



Material Beliefs

Workshop – Wednesday 18th April 2007

Welcome to this, the first Material Beliefs event.

The day is structured around presentations and break out discussions to invite your contribution to the project.

This pack contains information on:

- Workshop structure
- Afternoon breakout sessions
- Workshop delegates

We're keen to hear your thoughts on the project, so please do contact us at any time.

We hope you enjoy the day, and look forward to involving you in the project throughout its development over the next two years.

Andy Robinson Project manager

Engineers and Designers in collaboration for public engagement

Material Beliefs

Workshop Programme - Wednesday 18th April

Morning session Introducing engineering and design collaborations

10.00–10.30 Registration and coffee

10.30–10.45 Welcome and introductions

10.45–11.45 **Engineering collaborations** (10 mins present & 5 mins feedback each) Bill Gaver Steve Benford Jane Prophet Ian Thomson

11.45–12.00 Coffee

12.00–13.00 **Engineering and debate** (10 mins present & 5 mins feedback each) Brendan Walker Fiona Raby Martin Conreen & Zoe Laughlin Tobie Kerridge

13.00–14.00 Lunch

Engineers and Designers in collaboration for public engagement

Afternoon session Considering engineering and design collaborations

14.00–14.45 Activity 1: Research, themes, values and implications Facillitated breakout discussions

14.45–15.00 Feedback session

15.00–15.15 **Coffee**

15.15–16.00 **Activity 2: Describing a model for collaboration** Facillitated breakout discussions

16.00–16.30 Feedback session and summary

16.30–17.00 Chats, evaluation form and expenses

Material Beliefs - Breakout sessions

Breakout 1: Research, themes and implications

14.00–14.45 Activity 14.45–14.30 Feedback

We will have seen a range of ways that engineers and designers can form collaborations around issues and technologies. Material Beliefs sits in a particular location in this landscape. A core aim of the project is to use design to find a language that provokes engagement with engineering research.

Break up the available time into three periods, and explore the nature of collaboration in Material Beliefs through three lenses:

Research:

We are Imagining design as a toolkit for communication, and engineering research as the subject matter. Engagement and research are clearly two different things.

- What problems might arise as we pick a path between provoking interest and showing detail?
- Can you point to examples where collaboration has got this balance right?
- How can we apply these examples, so our collaborations work?

Themes:

Technological interfaces between bodies and materials are a broad and emotive theme. There are a number of scales, for example implants within, prosthetics around, and networks for remote connections to the body.

- What current research excites us, and provides scope for collaboration?
- How would we like to extend or refine the focus of Material Beliefs?
- Can you point to things form the past that can support the future of this project?

Implications:

Through engagement with publics, these collaborations will invite and make explicit a range of issues and attitudes. We need to allow space for unexpected and sometimes extreme responses, while providing access to 'real' engineering and science.

- What key issues are at stake when we consider the project theme?
- What responses and agendas in particular are we anxious about?
- What effects would we like the project to have, or what role should it play within this landscape?

Breakout 2: Defining a model for collaboration

15.15–16.00 Activity 16.00–16.15 Feedback

The issues discussed in the first breakout lead us onto more practical discussions about setting-up, doing and then evaluating the collaborations. The aim here is to work through the points below, and to include other perspectives that might arise from discussion, so that we close the day with a set of suggestions from which to assemble a model for collaboration.

Try to use the sections below as a start to addressing three phases of collaboration:

Setting up:

We're now looking to initiate collaborations between engineers and designers. It's important for everyone to be up-front about interests, aims and objectives, and to feel that their opinions are considered.

- What are key issues in finding a match?
- What motivators are important for engineering departments? Designers?
- Can we identify shared and divergent aims and interests?

Doing:

The ongoing collaboration will be subject to various pressures and local demands. Working flexibly and responsively will help create a shared culture that allows the project to progress.

- How can we address practical issues (e.g. time, resources, location and travel) that might derail collaboration?
- How can we expose and bridge differences (e.g. language, goals) between the disciplines?
- Are their particular roles within the engineering group that we should engage with?

Evaluating:

Project evaluation can be built-in at the start. This can include reflecting on the project in an informal way, and looking for ways to identify effective practices along with problems within our approach.

- What are innovative ways to document the process? Strengths and weaknesses?
- How and when should the four collaborations meet to discuss progress?
- What other institutions and professional bodies should we link with, and how?

Material Beliefs - Workshop Delegates

Julien Anderson

BA final, Despartment of Design, Goldsmiths, University of London dt301ja@gold.ac.uk

Steve Benford

Professor of Collaborative Computing, School of Computer Science, University of Nottingham. sdb@cs.nott.ac.uk http://www.mrl.nott.ac.uk/~sdb/ Steve Benford co-founded the MRL and is a co-investigator of the Equator IRC.

He has published over 200 works, including six papers in ACM Transactions on CHI, 18 full papers at CHI (including a best paper award in 2005), 3 recent articles in Communications of the ACM and a full technical paper at SIGGRAPH. His work has been supported through EPSRC (including the IRC, CSCW, Multimedia Network Applications, Healthcare Informatics, Flightdeck Safety and ROPA schemes), AHRB, ESRC, and under the European Basic, Long Term and Future and Emerging Technologies research programmes. He was project manager of the EU funded KidStory project and is current scientific manager of the Integrated Project on pervasive Gaming. He was a recipient of the 2003 Prix Ars Electronic Golden Nica for Interactive Art for his contribution to Can You See Me Now?

Andy Boucher

Research Fellow, Interaction Research, Department of Design, Goldsmiths University of London a.boucher@gold.ac.uk

http://www.goldsmiths.ac.uk/interaction/

Andy has a background in industrial design, and has undertaken research from this perspective for over six years, concentrating on the deployment of innovative research prototypes in real-life situations. His work explores the role of users in the design process, from inspiration to realisation, using new methodologies and techniques. Prior to studying industrial design at the Royal College of Art, Andy completed the Designer Maker BA at the Exeter School of Art and Design.

John Bowers

Research Fellow, Department of Design, Goldsmiths, University of London john.m.bowers@googlemail.com

http://www.goldsmiths.ac.uk/interaction/

John is concerned with the design and experience of innovative technologies, particularly in public spaces and domestic settings. He has contributed to the fields of Computer Supported Cooperative Work (CSCW) and Human Computer Interaction (HCI) for over 15 years, with particular concern for the use in design of social scientific research methods such as ethnography and interaction analysis. John also works as a musician and sound artist with an especial interest in improvisation, hardware hacking and innovative instruments and performance environments.

Adrian Bowyer

Senior Lecturer, Mechanical Engineering Department, Bath University A.Bowyer@bath.ac.uk http://staff.bath.ac.uk/ensab/ In the early 1970s Adrian Bowyer read for a first degree in mechanical engineering at Imperial College, and then researched a PhD in tribology there. In 1977 he moved to Bath University's Maths Department to do research in stochastic computational geometry. He then founded the Bath University Microprocessor Unit in 1981 and ran that for four years. After that he took up a lectureship in manufacturing in Bath's Engineering Department, where he is now a senior lecturer. His current areas of research are geometric modelling and geometric computing in general (he is one of the authors of the Bowyer-Watson algorithm for Voronoi diagrams), the application of computers to manufacturing, and biomimetics. His main work in biomimetics is on self-copying machines.

Elio Caccavale

Designer, Lecturer and researcher on Material Beliefs elio@eliocaccavale.com

http://www.eliocaccavale.com

Elio Caccavale, born in Naples, Italy, studied Product Design at Glasgow School of Art before going on to the Royal College of Art to complete a master in Design Products. He has since divided his time between consultancy, research, teaching and writing. His projects typically involve collaboration with natural scientists, social scientists and biomedical ethicists and explore the emerging biotechnologies and the effects that they might have on life in the future.

Elio has recently presented his work at the World Forum on Science and Civilization organized by The James Martin Institute (part of the University of Oxford) and the ESRC genomics policy and research forum (part of the University of Edinburgh). His work has received many awards including the Wellcome Trust Sciart Award. He Product Design at Central Saint Martins College of Art and Design (part of the University of the Arts) and is a visiting lecturer on the MA Design Interactions course at the Royal College of Art. He is currently working on a new research project exploring life enhancement technologies and co-writing a chapter with Prof. Michael Reiss (Chief Executive of Science Learning Centre London) for the forth coming Creative Encounters book to be published by the Wellcome Trust.

Karen Cham

Lecturer Digital Media, Dept Design & Innovation, Faculty of Technology, Open University

K.L.Cham@open.ac.uk

http://design.open.ac.uk/cham/index.htm

I work in a diverse department with engineers, designers and technologists that aims to provide an interdisciplinary non-domain specific approach to a rigorous understanding of the principles and processes of design. I am also a member of the Embracing Complexity in Design research cluster that explores objective the part played by complexity science in design, and the potential for design to play a major role in the emerging science of complex systems. In June I am running an international workshop/exhibition on Complex Systems Science and Art.

Emily Dawson

Research Associate, Science Communication Unit, University of the West of England Emily.Dawson@uwe.ac.uk http://www.uwe.ac.uk/fas/graphicscience/the_team/emily_dawson.htm Emily comes from a Museums background and has recently completed her Museum Studies MA at Leicester University. Before joining the Science Communication Unit at UWE Emily spent the summer working in the Design and Interpretation Department of the Natural History Museum, working on the new Darwin Centre and developing content for other exhibitions. Previously Emily has worked at the Royal Institution and Hoxton Hall on heritage, access collection management and education. Emily's main research interest is on transdisciplinary theory and practise, in particular how art and science can be brought together in exhibitions, education and communication.

Patrick Degenaar

Lecturer in Neurobionics, Institute of Biomedical Engineering & Division of Neuroscience, faculty of Medicine, Imperial College p.degenaar@imperial.ac.uk

http://www.imperial.ac.uk/people/p.degenaar

Patrick Degenaar is a lecturer in Neurobionics. His position spans the Institute of Biomedical Engineering and the Division of Neuroscience in the faculty of Medicine. He has an interdisciplinary background in Materials Science, Electronic Engineering and the Biosciences. He holds a first class Hons degree in applied physics and M.Res in Surface Science from Liverpool University. He then received a Monbusho scholarship to do a Bioelectronics and Bioimaging Ph.D. in the Japan Advanced Institute for Science and Technology.

Patrick's interest includes prosthetic vision systems and visual aids for the blind and visually impaired. He is very interested in the evolutionary choices nature has made in sensory system development. He is thus keen to develop biomimetic sensory systems such as artificial retinae. As Patrick's backgrounds includes the materials sciences in addition to engineering and biology. Thus he is keen to use some of the novel properties of functional nanoparticles and organic smart materials in his research.

Bill Gaver

Professor of Design, Goldsmiths, University of London w.gaver@gold.ac.uk

http://www.goldsmiths.ac.uk/interaction/

Bill has pursued research on innovative technologies for over 15 years, following a trajectory that led from experimental science to design. His research work has spanned auditory interfaces, theories of perception and action, and interaction design. Currently he focuses on design-led methodologies and innovative technologies for everyday life. Much of his work has been pursued with and for companies such as Intel, France Telecom, Hewlett Packard, IBM and Xerox. He is a principal investigator of the EPSRC-sponsored Equator IRC, and is a member of the AHRC and EPSRC Peer Review Colleges. Bill is PI for Material Beliefs.

Ben Hanson

Lecturer, Department of Mechanical Engineering, University College London b.hanson@ucl.ac.uk

http://www.mecheng.ucl.ac.uk/staff/?staff_id=bh

Ben Hanson's areas of research interest are mechatronics and control, applied to biomedical systems. His research involves the development of miniaturised self-sensing transducers to measure viscoelastic properties of biomaterials, and also investigates the control and optimal design of electromagnetic machines. He also collaborates on a research team developing an artificial muscle heart assist device, and is developing mechatronic simulations of biological systems (e.g. heart and cardiovascular system) by combining computerised models with mechanical testing devices.

Tom Hulbert

Co-founder/Designer, Luckybite LLP tom@luckybite.com http://www.luckybite.com

Tom Hulbert works between product and interaction design. He has worked for IDEO in London and has been involved in research at Casio in the US and at the Interaction Design Institute in Ivrea, Italy. His work at IDEO ranged from design for products and spaces to user interfaces. Tom's interface design for an Olivetti printer has recently helped IDEO win Design Week Award 2006 for best product. He is also a tutor on the Interaction Design course at the Royal College of Art in London. Tom co-founded Luckybite in 2004 with Durrell Bishop. Recent Luckybite clients include Nokia, Panasonic, Reuters, BBC and the Science Museum.

Dr Joanne Ingram

Post Doctoral Research Fellow, Institute of medical and biological engineering, University of Leeds

j.h.ingram@leeds.ac.uk

http://www.imbe.org.uk/imbe/

A member of the Institute of Medical and Biological Engineering (IMBE) at the university of Leeds. I gained a PhD in 2002 studying the biological responses to particulate UHMWPE wear debris generated during articulation of artificial hip prostheses. Following completion of my PhD I switched directions and began looking at tissue engineering solutions for orthopaedic applications. Additionally I am a trained Science and Engineering Ambassador (SetPoint, West Yorkshire) enabling me to be involved in school visits and workshops at the iMBE. In 2006 I was selected as a finalist in the BA perspectives competition for science communicators as part of the national science festival.

Steve Jackman

Film Maker stevej@selondon.freeserve.co.uk

Vicky Jones

Associate Programme Manager, Engineering Programme, EPSRC vicky.jones@epsrc.ac.uk http://www.epsrc.ac.uk After completing my PhD in Chemistry at Bristol University, I joined the Research and Innovation Directorate of EPSRC in 2002, as an Associate Programme Manager. Working in the Engineering Programme, I initially had responsibility for the control and systems engineering portfolio. However, 18 months ago I switched

responsibilities and now look after our medical engineering portfolio. I am also a member of our Healthcare Sector Team that aims to ensure that we have a proper understanding of the research and training needs of the Healthcare sector and provides advice for businesses and other organisations that want to work with universities.

Tobie Kerridge

Research Fellow, Interaction Research Studio, Goldsmiths, University of London tobie@materialbeliefs.com

http://www.materialbeliefs.com

*Tobie is currently working on collab*orative projects funded by Intel and EPSRC. His research explores how design methods can be extended to provide individuals with access to, and creative authorship over, technological innovation. He is also a visiting lecturer at the Royal College of Art and Central Saint Martins. Before graduating from Interaction Design MA at the RCA, Tobie took a BA in English Literature and Fine Art at Oxford Brookes University.

Tobie collaborated with Ian Thompson and Nikki Stott on Biojewellery, an EPSRC funded public engagement of science and technology project. Following Biojewellery, he wrote the Material Beliefs proposal with Savita Custead after an EPSRC Ideas Factory in 2006.

Sarah Ketley

Arts and Technology Research Fellow, Centre for Interaction Design, Napier University, Edinburgh S.Kettley@napier.ac.uk http://www.soc.napier.ac.uk/researchgroup/researchgroupid/3210/op/ displayonegroup Sarah Kettley is an interaction design researcher working in the broad domain

of wearable computing. A practicing contemporary jeweller, she project manages interdisciplinary teams to develop and realize innovative conceptual designs that precursor social and pervasive computing. She recently completed an Arts and Humanities Research Council Fellowship, producing ensemble, a theatrical network of jewellery and sound for eight people in collaboration with the Speckled Computing Consortium, Scotland.

In January 2007, Sarah was supported by the Scottish Arts Council Lottery Fund to attend the Australian Network for Arts and Technology media lab, reSkin, in Canberra. This experience resulted in the piece Stille, a quiet neckpiece with digital wildlife sounds, and a shift towards physical computing as a way of integrating craft and interaction design more successfully. Sarah publishes across the fields of craft, interaction design and wearable computing, and is due to complete her doctoral degree with Napier University in July 2007.

Zoe Laughlin

Materials Research Group, Division of Engineering, King's College London zoe.laughlin@kcl.ac.uk

www.materilaslibrary.org.uk / www.asifitwerereal.org.

Zoe Laughlin is the curator of the Materials Library and a member of the Materials Research Group in the Division of Engineering at King's College London. Within this scientific context she works as an artist on the interdisciplinary Materials Library Presents project that sees art and science combined in the production of live public experiential encounters with matter. Current projects include "What Can The Matter Be?" –an audio accompaniment to Tate Modern for those interested in the stuff of art, The Performativity of High Performance Materials and Materials for the Advancement of Conceptualisation

Ana Lisa

Design BA, Goldsmiths, University of London dt301aa@gold.ac.uk

Jimmy Loizeau

Designer and Lecturer jimmy@loizeau.co.uk http://www.auger-loizeau.com/

Dr Ray Mathias

Consultant in Science Communication and Education, Mentor to Material Beliefs project

ray @danes mead.net

I worked as a research scientist in plant biotechnology for over 20 years. During this period I led programmes developing biotechnology in cereal and brassica crops and the domestication of wild and ornamental plants as non-food oilseed crops. For 10 years I was Head of Science Communication and Education at the John Innes Centre, Norwich, where I was responsible for spearheading the Centre's external and media liaison activities and their science and society programme.

Now working as a consultant in science communication, education, public engagement and PR, I am using my practical skills, extensive experience and technical knowledge to improve the way that individuals and organisations communicate – especially science and technology. My clients include the BBSRC, STFC, Environment Agency and EPSRC. I have a strong interest in creativity in science teaching in schools expressed through a project I run called Growing Sound and my participation in PAL Creative Science Teaching Labs.

Mike Michael

Professor of Sociology of Science and Technology at the Sociology Department, Goldsmiths, University of London.

M.Michael@gold.ac.uk

http://secure2.gold.ac.uk/sociology/staff/michael.php

His interests include public understanding of science, the relation between everyday life and science and technology (especially as materialised in mundane artefacts), and biotechnological and biomedical innovation and culture. Recent research includes studies of ethical aspects of stem cell research, and the mutual structuring of technoscience and everyday life. He is elaborating an interest in the inter-relations between design and sociology at both substantive and methodological levels, Relevant publications include Reconnecting Culture, Technology and Nature: From Society to Heterogeneity (Routledge., 2000) and Technoscience and Everyday Life (Open University Press, 2006).

Mark Palmer

Senior Lecturer in Games Technology, School of Computer Science, Faculty CEMS, UWE

Mark.Palmer@uwe.ac.uk

Marks undergraduate and masters degree were within Fine Art but his research degree saw him working within Modern Continental Philosophy and Virtual Reality. Since then he has worked on a number of collaborative projects as diverse as a New Technology Arts Fellowship at the University of Cambridge, research into the affect of commissioning processes for new artwork within PFI projects and new AI routines within Games Technology. These projects have been framed by a philosophical interest in complex systems and the need to move away from notions of creative practise based around notions of individual creativity towards the generative potential of collaboration.

Lesley Paterson

Head of Public Engagement, Royal Academy of Engineering lesley.paterson@raeng.org.uk

http://www.raeng.org.uk/engagement

Lesley Paterson is Head of Public Engagement at the Royal Academy of Engineering. Her current focus is to build an infrastructure upon which public engagement with engineering can take place, through two principle objectives. Firstly, to foster a community of engineers that is skilled in communicating and open to dialogue and debate with the public. Secondly to develop networks and partnerships between engineers and 'public facing institutions'. Lesley has worked in public engagement with science, technology and engineering for 10 years. Prior to the Academy, she was at the Wellcome Trust where she managed science and society grant schemes and ran a programme of events to encourage networking between public engagement practitioners, including the inaugural "Engaging Science Conference 2006". Previous positions include 'PA' to a sheep (as Dolly's 'scientific secretary' in Roslin Institute) and enthusiastically trying to engage 1000s of Scottish school pupils through Edinburgh University's schools outreach programme "Sci-Fun". She started life as a marine biologist wanting to work with dolphins and ended up slightly lower down the evolutionary scale with a Phd in worms.

Jane Prophet

Artist

jane@janeprophet.com

http://www.janeprophet.co.uk/

Jane is a renowned British visual artist, who uses traditional and new media and materials to produce surprising and beautiful objects. Site-specific installations include Conductor, a flooded power station lit with 120 electro luminescent cables. Decoy and The Landscape Room combine images of real and simulated landscapes, and her latest work, Model Landscapes, uses rapid prototyping to make miniature trees from mathematical data. Prophet is the driving force in a number of internationally acclaimed projects that break new ground in art, technology and science. Her collaborations with stem cell researchers, mathematicians and heart surgeons radically re-envisage the human body. In 2005 she won a National Endowment for Science, Technology and the Arts Fellowship to develop interdisciplinary artworks like Net Work (comprising hundreds of illuminated buoys) and Big Plastic Tree (an artwork built by robots).

Fiona Raby

Partner, Dunne & Raby. Tutor, Design Interactions, The Royal College of Art fiona@dunneandraby.co.uk

http://www.dunneandraby.co.uk

Dunne & Raby use products and services as a medium to stimulate discussion and debate amongst designers, industry and the public about the social, cultural and ethical implications of emerging technologies.

Many of our projects are collaborative, working with industrial research labs,

academia and cultural institutions. Projects include: Hertzian Tales, a combination of essays and design proposals exploring the aesthetic meanings of electronic objects (published 1999); FLIRT, a European Union funded research project investigating location-based services for mobile phones (published 2000); Placebo, a collection of electronic objects which explore mental well-being in relation to domestic electromagnetic fields (2000-2001) BioLand an ongoing research project investigates how a critical design approach can be applied to the field of biotechnology (2002-).

Design Noir: The Secret Life of Electronic Objects was published by August/ Birkhauser in 2001.

Tara Renten

Kings College London

Claire Rocks

Science Communication Unit, University of the West of England claire.Rocks@uwe.ac.uk http://www.raeng.org.uk/engagement

Claire takes lead responsibility for coordinating the Walking with Robots network, which is a three-year programme of public events funded by the EPSRC. The Walking with Robots network brings key intelligent robotics researchers together with leading science communicators to promote a wider public engagement with the reality of contemporary robotics research and with the people who do that research. Claire brings to the role a PhD in space robotics and was involved with the Beagle 2 Mars probe. She has extensive experience in science communication in 2004 she was chosen as an EPSRC NOISE (New Outlooks in Science and Engineering) role model. Recently Claire has been involved in a number of UK science festivals, invited talks and masterclasses on the subject of robotics.

Andy Robinson

Project Manager, Material Beliefs andy@materialbeliefs.com http://www.materialbeliefs.com

Pete Sampson

Graphic Designer, Hyperkit pete@hyperkit.co.uk http://www.hyperkit.co.uk

Hyperkit is a graphic design studio run by Tim Balaam and Kate Sclater. Our commissioned work is informed by our personal interests, fascinations and self-initiated projects. We work at any scale, from stationery, small publications and other printed matter, through to websites, exhibition design and branding. We create engaging graphic design that is sympathetic to the subject and context. We are passionate about what we do.

Andres Sandberg

Researcher, Uheiro Center for Practical Ethics and the Future of Humanity Institute, both at the Faculty of Philosophy, Oxford University anders.sandberg@philosophy.ox.ac.uk http://www.fhi.ox.ac.uk/Enhancement/enhancementindex.htm I have a Ph.D. in computational neuroscience from Stockholm University, where I also worked with virtual reality and information visualisation. I started a think tank looking at the interaction between emerging technologies and society, as well as a touring exhibition about neuroscience. Currently working on the ethics and social impact of human enhancement at Oxford University.

Ian Thomson

Research Fellow - Development of novel medical devices for the treatment of maxillofacial disease and trauma, Kings College London i.thompson@kcl.ac.uk

http://www.kcl.ac.uk/dentistry/research/res05/bio.html In 2002, Ian moved to the Oral and Maxillofacial Surgery Department at Guy's Hospital (part of King's College London) where he leads a research team looking at clinical uses of bioactive materials. Ian's laboratory is a leader in bioactive glass facial prosthetics and is currently using such materials in the 'Bio-Jewellery' project. Ian also leads a number of public awareness programs funded by the Wellcome Trust and EPSRC looking at a) public perceptions of medical materials research, b) development of surgical techniques since World War 1 - a soldier's story.

Ian Thompson graduated from the Materials Department from Queen Mary University of London (Formerly, Queen Mary & Westfield College) in 1996. Completed a PhD with Professor Larry Hench at Imperial College London studying bioactive glass composites. Stayed at Imperial for a post doctoral research post and ultimately as a Projects Manager for one of the countries leading Tissue Engineering Centres. Moved to Guy's Hospital in 2002 in order to help patients in today's society.

Ian is also Managing Director of OSspray Ltd, a materials research company developing dental treatments/therapies to eliminate dental sensitivity, improve oral hygiene and regain natural tooth colour.

Nicola Triscott

Director, The Arts Catalyst nicola@artscatalyst.org www.artscatalyst.org

Nicola Triscott is an arts producer and curator working in the performing, interdisciplinary and visual arts. She set up the pioneering arts organisation The Arts Catalyst in 1993, which specialises in commissioning new art projects that explore science and technology as transforming forces in culture and society. The Arts Catalyst works nationally and internationally, facilitating interdisciplinary enquiry and expanding new territories for artistic practice.

As Director of Arts Catalyst, she has commissioned more than 50 art projects. Her particular interests are artists1 engagement (artistic, practical and tactical) with biotechnology, space research and microgravity, ecology, and research in remote environments. She was project leader for the European Commission funded MIR project (2001-2004), which included organising several dedicated parabolic zero gravity flights for artistic experimentation with the Gagarin Cosmonaut Training Centre, Star City, Russia. She was the project leader for a study commissioned by the European Space Agency to develop a cultural policy for the International Space Station. Nicola speaks frequently on art and science, cultural aspects of space and interdisciplinary education at international conferences. She is the editor of several Arts Catalyst publications.

Brendan Walker

Director, Aerial info@aerial.fm http://www.aerial.fm/docs/home.php

Brendan Walker originally trained as an aeronautical engineer at Imperial College, London and worked for British Aerospace Military Aircraft for five years before undertaking an MA in Industrial Design Engineering at the Royal College of Art, London. For eight years he combined his professional practice with working in the research studio of the Interaction Design Department at the RCA. In that time he collaborated on several major international research projects. In recent years he has defined his own design research domain, chromo11: engineering the thrill, which was funded by both the AHRB and Wellcome Trust. He originally wanted to understand his romance with moving structures, and their potential to thrill him. However, this led him to ask a more fundamental question: can design effectively elicit an emotional response? In chromo11 he attempted to answer this question by drawing on his collective interests and training in art, design, science and engineering to explore thrill. Brendan now runs Aerial specialising in the creation of tailored emotional experience. Aerial offers strategic consultancy; the design and production of intriguing interactive electromechanical installations, sculptures and rides; and the curating and staging of engaging events.

Alex Wilkie

Centre for the Study of Invention and Social Process, Department of Sociology a.wilkie@gold.ac.uk

http://www.goldsmiths.ac.uk/csisp/

Alex is currently writing his PhD thesis on the practice of user-centered design and the role of the user – as a non-human entity – therein. This work draws upon extensive ethnographic fieldwork Alex has conducted within the organisational setting of a multinational semiconductor manufacturer. His research interests include the politics of technology, the sociology of expectations and object-centered practices.