Introduction

LifeSpace is Scotland’s first dedicated art-science-research gallery. The gallery opened on October 3rd, 2014 and is located within the School of Life Sciences at the University of Dundee. For the first time in Scotland, science and art coexist in a space that houses some of the brightest scientific minds in the country. The mission of LifeSpace is to engage artists and scientists in exciting new collaborations and to foster long-term cross-disciplinary activity that will provide these communities and the public with greater insight into the broad spectrum of life sciences research. This new research-driven gallery space is curated as a collaborative partnership between researchers from Duncan of Jordanstone College of Art and Design and researchers from the School of Life Sciences. It enables an exciting opportunity for interdisciplinary art and science interactions as well as providing a location for curatorial exchange between staff, students, researchers and the general public.

In our first year of opening we have held five exhibitions ranging from the implications of human co-existence with microbial life to the ethics of the use of human tissue in art and science. We have integrated a series of outreach events as part of our programming including artists talks, debates and school workshops, welcoming over 1000 visitors through the gallery doors. A particular highlight of 2015 has been the exhibition Seeing through the see-through, featuring art works created by our first artist-in-residence Mat Fleming.

This review outlines some of the activities undertaken in this groundbreaking first year for LifeSpace.

LifeSpace Gallery
University of Dundee
Scales of Life marked the opening of the gallery in October 2014. The exhibition communicated the key scales of biological life from molecules to cells to whole organisms, and featured works of contemporary art by Thomson & Craighead, Elaine Shemilt, Tabitha Moses and Helen Chadwick alongside historical artefacts from Museum Collections at the University of Dundee. The exhibition mirrored the research expertise within the School of Life Sciences, which encompasses biomedical, biological and chemical sciences, ranging from molecular structure and drug design to genetics and cellular control mechanisms of whole organisms.

Works in the exhibition included: ‘Stutterer’, a new commission by award-winning artists Thomson & Craighead (http://thomson-craighead.net), in which the human genome sequence is harnessed to drive a significant new installation that considers how we understand ourselves and the world around us; sculptures and embroideries by Tabitha Moses (http://www.tabithakyokomoses.com) that explore the skin as a threshold between the inner and the outer worlds; one of a series of Viral Landscapes by the late artist Helen Chadwick (http://en.wikipedia.org/wiki/Helen_Chadwick), in which photographic images of a rocky and savage coastal landscape are overlaid and merged with enlarged images of cells from her own body; and prints by Elaine Shemilt (http://elaineshemilt.co.uk), Professor of Fine Art Printmaking at Duncan of Jordanstone College of Art and Design, which complemented her ongoing collaboration with the School of Life Sciences in the creation of a new permanent public work incorporated into the facade of the new Discovery Centre (http://www.lifesci.dundee.ac.uk/other/ctir/artwork.html).

Scales of Life
3 October 2014 – 11 January 2015

Scales of Life, installation view.
Photo: Ruth Clark.
Within a research setting, work that involves human tissue is subject to strict regulatory requirements, as is the possession of human material for medical and scientific education or training. But what ethical framework exists for the use of human tissue from living consenting donors in art?

Material Concerns brought together work by Gina Czarnecki, David Connaughton, Carolee Schneemann, Verena Friedrich and Alec Finlay with current research and historical artefacts from the University of Dundee to better understand the various processes of consent and the ethics employed in the donation and use of human tissue.

The centrepoint of the exhibition was the sculpture, Palaces, by artist Gina Czarnecki from a series of works titled Wasted, which consider the life-giving potential of ‘discarded’ body parts and their relationship to myth. Its creation was in part inspired by the artist’s then 7 year-old daughter’s inquiry about the tooth fairy’s existence.
Transmissions
Exploring the Microbial World
12 June 2015 – 5 September 2015

Transmissions explored the microbial world and the implications of human co-existence with microbial life. The exhibition featured work by artists who collaborated with scientists to consider representations of microbial life, the global impact of microbial diseases and the evolution of antimicrobial resistance.

Transmissions brought to Dundee recent art works in print, sculpture, photography and film by Mark Doyle, Jo Hodges & Robbie Coleman and Anne Milne, made as a result of a residency programme at the Centre for Immunity, Infection and Evolution at the University of Edinburgh supported by ASCUS Art & Science.

Alongside these works of art, the exhibition included historical artefacts brought together from the Museum Collections and the Archives at the University of Dundee and a selection of current research being conducted at the University of Dundee and the University of Edinburgh in this area.

Transmissions was supported by the Medicines for Malaria Venture and was a partnership between LifeSpace: Science Art Research Gallery and ASCUS Art & Science with the Centre for Immunity, Infection and Evolution at the University of Edinburgh.
Hearts & Minds was a two-part exhibition of contemporary art, artefacts and scientific research that considered the perception and wellbeing of the human organs of the heart (at Hannah Maclure Centre) and the brain (at LifeSpace).

The Hearts exhibition arose from an ongoing body of cardiovascular research at Abertay University. The exhibition explored the scientific and artistic research relating to this life-giving organ, examining local ground-breaking heart disease research and sharing the work of internationally renowned artists whose practice is concerned with the heart in transplantation, the heart as a system, the heart as a poetic object. The exhibition featured work by Ingrid Bachmann, Martin John Callahan, Jennifer Kelly, Catherine Richards and Martin Snelgrove alongside the scientific research of Dr Nikolai Zhelev.

The Minds exhibition was based around a new dynamic work that uses tweets to determine the nuances in how Dundee’s inhabitants are feeling day to day. This periodic table of emotions by artist Aidan Moesby, suggested the feedback loop that exists between our brains, consciousness and bodily behaviour. Minds showcased research at the University of Dundee to better understand changes in the brain during neurodegeneration, and the ion channels that enable the flow of the brain’s electrical signals. Work by leading artists included MRI scans turned into responsive talismans, and sentimental objects into physical reminders of the lesions that can plague the healthy tissue of the brain. Accompanied by work in print and film, Minds invited audiences to reflect upon their own brain’s physical and mental health. The exhibition featured work by artists Ingrid Bell, Tamsin van Essen, Aidan Moesby, Anne Milne and Jim Pattison alongside the scientific research of Dr. Miratul Muqit and Dr. Ulrich Zachariae.
This exhibition was the result of a nine-month residency by Mat Fleming in the Dundee Imaging Facility in the School of Life Sciences supported by The Leverhulme Trust. Mat Fleming is an artist based in Newcastle who has long worked in collaboration with others to make his art including films, moving image installations, music videos, and prints, as well as to create cinemas, curate screenings and run workshops in shooting, editing and processing film.

During his residency Mat collaborated with scientists Alan Prescott, Jens Januschke and others, and this exhibition brought an artist’s view to both the history and current practice of creating micrographs, ranging in media from film and photography to hand-drawn animations based on digital images.

Fascinating work with microscopy. Beautiful imagery. Inspiring
- visitor to Seeing through the see-through

over
1000
visitors in the first year
Commissions

Thomson & Craighead’s ‘Stutterer’ was commissioned through a Wellcome Trust Small Arts Award and developed in collaboration with scientists in our Division of Computational Biology. The work was acquired into University collection and is on tour, now showing in an international exhibition at The Lowry, Salford.

Where possible LifeSpace seeks to work with artists to allow them to present new work or work in a new form within the exhibition programme. Alec Finlay’s ‘Organstones’ (found and selected by Alec Finlay and Amy Todman, with Leenie Dunlop and Hanna Tuulikki, and then photographed by Hannah Devereaux) were printed especially for the Material Concerns exhibition by Dr Paul Harrison at the Publishing Facility of the Visual Research Centre, DJCAD. It is anticipated that all work commissioned for exhibition at LifeSpace is accessioned into the Museum collection in agreement with the artists.

Residencies

Mat Fleming’s residency in the Dundee Imaging Facility in the School of Life Sciences was supported by The Leverhulme Trust. This residency spanned 9 months to enable the artist to be present in the School on a regular basis week on week and for our first residency is a model we’d like to continue with as it offered sustained engagement and collaboration across both Life Sciences and the College of Art and Design.

With the exhibition Transmissions, LifeSpace was able to give an additional exhibition opportunity to artists who had created their work as a result of micro-residencies led by arts organization ASCUS in Edinburgh. Material Concerns also featured work by Verena Friedrich made when she was in residence in the Symbiotica Lab in Australia. LifeSpace aims to partner with other organisations on hosting residencies with Dundee’s research community, as well as exhibit and tour work created by artists in residence in other scientific research centres.
Outreach

Outreach events play an integral role in providing access and insight to the exhibitions to a diverse audience. Our outreach programme is developed in partnership with the School of Life Sciences Public Engagement and School Outreach Team. A diverse range of activities have taken place throughout the year including from in-conversation events between artists and scientists, school workshops and tours for the public of the gallery and life sciences laboratories. All our events and exhibitions are free and open to the public.

Wherever possible we try to bring new groups of people into the gallery and with our second exhibition Material Concerns we held an arts and ethics panel debate involving representatives from research governance, the human tissue bank and art organisations to debate the ethics of the use of human tissue both in art and scientific research. We also try to create opportunities for artists in our exhibition programme to connect with the wider arts and research community outwith the gallery; for example, Thomson & Craighead and Mat Fleming both participated in the symposium programme of the NEoN Digital Arts Festival in 2014 and 2015 respectively.

We have held a range of schools workshops throughout the year involving engagement with local primary school children in activities such as hands on film-making and using a microscope. Many of our events are timed to coincide with local science festivals and open days such as the Dundee Women in Science Festival and the Dundee Science Festival.

LifeSpace outreach events 2014-2015:

- In-conversation between scientist Dr Nick Schurch and artists Jon Thomson and Alison Craighead (4 October 2014)
- In-conversation between scientist Dr Irwin McLean and artist Tabitha Moses (8 November 2014)
- Life Sciences Open Doors Day – tour by curator Dr Sarah Cook and artist Tabitha Moses (8 November 2014)
- Tour and talks by artists Alec Findlay and Gina Czarnecki (5 February 2015)
- Panel discussion on the current ethical picture for working with human tissue in science and art (29 May 2015)
- Tooth schools workshop with artist Gina Czarnecki (29 May 2015)
- Meet the artist workshop with artist Gina Czarnecki (30 May 2015)
- Knit night (18 June 2015)
- Saturday Craft drop in (4 July 2015)
- Art, Science and Antimicrobial Resistance panel discussion with artists Jo Hodges, Anne Milne, designer Louise Valentine, outreach manager Kasia Kokowska and scientist Dr Tracy Palmer (11 September 2015)
- Exhibition tour and talk by artist Mat Fleming and curator Dr Sarah Cook (29 October 2015)
- Image making Schools workshop with artist Mat Fleming and scientist Dr Alan Prescott (6 November 2015)
- Open Day - Part of Imagine, Explore, Discover - Science at the University of Dundee with artist Mat Fleming and scientist Dr Alan Prescott (7 November 2015)
Research

Exhibitions at LifeSpace are both occasion to highlight existing and ongoing research and a site for research itself, often at the crossover between art and science. The exhibition Transmissions was timed to include a major discovery by Dundee’s Drug Discovery Unit into an anti-malarial agent, with the exhibition launching the same week as the paper describing the compound was published in Nature. Material Concerns was an opportunity for research governance experts at the University to reflect on the ethical approval routes required for the for artists and students to use human tissue in art.

Researchers (lecturers and students) from University of Dundee as well as other nearby institutions, Universities of Edinburgh and St. Andrews, have visited LifeSpace to consider art history, exhibition design, interdisciplinary practices and media art. Undergraduate students in art attend lectures given by exhibiting artists.

Dr. Sarah Cook’s ongoing research area – the commissioning, exhibition, historicization and preservation of interdisciplinary media art – uses LifeSpace as a testing ground. She has given keynote lectures about the artworks and curatorial methods at the National Media Museum (Bradford, UK), the Graduate Centre for the Decorative Arts (New York), International Symposium on Electronic Art (Vancouver), The Met Office and Spacec Arts (Exeter, UK), the Lively Objects Symposium (Banff, Canada) and at the Intelligent Design and Digital Technologies Programme of The Pontifical Catholic University of São Paulo.
LifeSpace was established as a partnership between the School of Life Sciences and Duncan of Jordanstone College of Art & Design. Partnership between the two Schools has been essential to the delivery of the exhibition programme through interdisciplinary research collaboration and shared resources. Inter-departmental collaboration with museum and archive services has been integral to our approach to contextualise artworks with historical and current research at the University of Dundee.

LifeSpace has also sought to collaborate with other universities and arts organisations. In our third exhibition this year, Transmissions, we were very fortunate to partner with the art-science organisation ASCUS based in Edinburgh and the Centre for Infection, Immunity and Evolution (CIIE) at the University of Edinburgh. Their generous support enabled work resulting from an artist micro-residency programme at CIIE to be brought to Dundee. The exhibition also allowed the opportunity to highlight collaborative research between the universities of Dundee and Edinburgh in this area to provide scientific context for the exhibition. In Hearts & Minds we partnered with the Hannah Maclure Centre at Abertay University. This was an opportunity to support curatorial professional development by taking the model of exhibition-making pioneered at LifeSpace out to other venues.

As we continue with our exhibition planning we are increasingly looking to share resources and gain wider audiences for groundbreaking art science work created internationally. This involves becoming involved in the tour of exhibitions both to LifeSpace, and the tour created at LifeSpace to other venues as part of curated exhibitions, nominated prize shows, or standalone presentations. In 2016 Thomson & Craighead’s ‘Stutterer’ will be seen in Salford, London and Cambridge, while Mat Flaming’s exhibition could tour as a complete exhibition or as an entry in film screening programmes.

Partnerships

Staff

The LifeSpace Steering Group has strategic oversight of the LifeSpace programme and comprises:

- Dr. Sarah Cook
  Curator & Research Fellow, Art & Design

- Dr. Morag Martin
  Research Strategy and Development Officer, Life Sciences

- Prof. Mike Ferguson
  Regius Professor of Life Sciences and Associate Dean for Research Strategy

- Mr. Matthew Jarron
  Curator of Museum Services

- Prof. Elaine Shemilt
  Artist, Professor of Fine Art Printmaking

- Prof. Stephen Partridge
  Associate Dean of Research, Art & Design

- Prof. Kate Storey
  Head of Cell & Developmental Biology, Life Sciences

- Dr. Sarah Hussain
  Publicity and Communications Officer, Life Sciences

Dr. Cook and Dr. Martin jointly manage all LifeSpace programming, marketing and budget management with the assistance of Cicely Farrer in the Exhibitions office at DJCAD. Prof Ferguson provides fundraising assistance. Installation of exhibitions and handling of any loaned works is supported by the exhibitions team of the University, including technician Mr. Andrew Dodds, and collections curator Mr. Matthew Jarron. The Research office of Duncan of Jordanstone College of Art and Design provides project management support with input from Prof. Stephen Partridge.

Events and other outreach events are managed by Dr. Sarah Hussain, Publicity and Communications Officer at the School of Life Sciences, and Ms. Erin Hardee, Schools Outreach Officer.

Throughout the year we have received invaluable help from a number of colleagues across the University and beyond. In particular we would like to thank: Alan Prescott, Jason Swedlow, Irwin McLean, Inke Nathke, Paul Appleton, Sam Swift, Angela Mehiri, Nicola Stanley-Wall, Sonal Das, Miratul Muqit, Ulrich Zachariae, Jens Janschke, Ian Gilbert, Suzanne Duce, Sam Swift, Nick Schurch, Chris Cole, Geoff Barton, Clare Brennan, Karen Pope, Tracy Palmer, Louise Valentine, Caroline Brown, Hope Roberts, Christina Schilde, Paul Harrison, our team of Saturday invigilators, and of course all the artists who have worked with us to show their work in LifeSpace’s programme.

9210 View-Master Stereomatic 500 with carrying case, produced 1952-55, Sawyer’s Inc, Bassett, David L (University of Dundee Museum services, Anatomy collection DUNUC 10335)
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Grants Awarded:

£2,000  Binks Trust
£29,876  Wellcome Trust Small Arts Award for commission of Stutterer by Thomson & Craighead
£1,500  Medicines for Malaria Venture
£15,000  Leverhulme Trust Artist-in-residence award

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