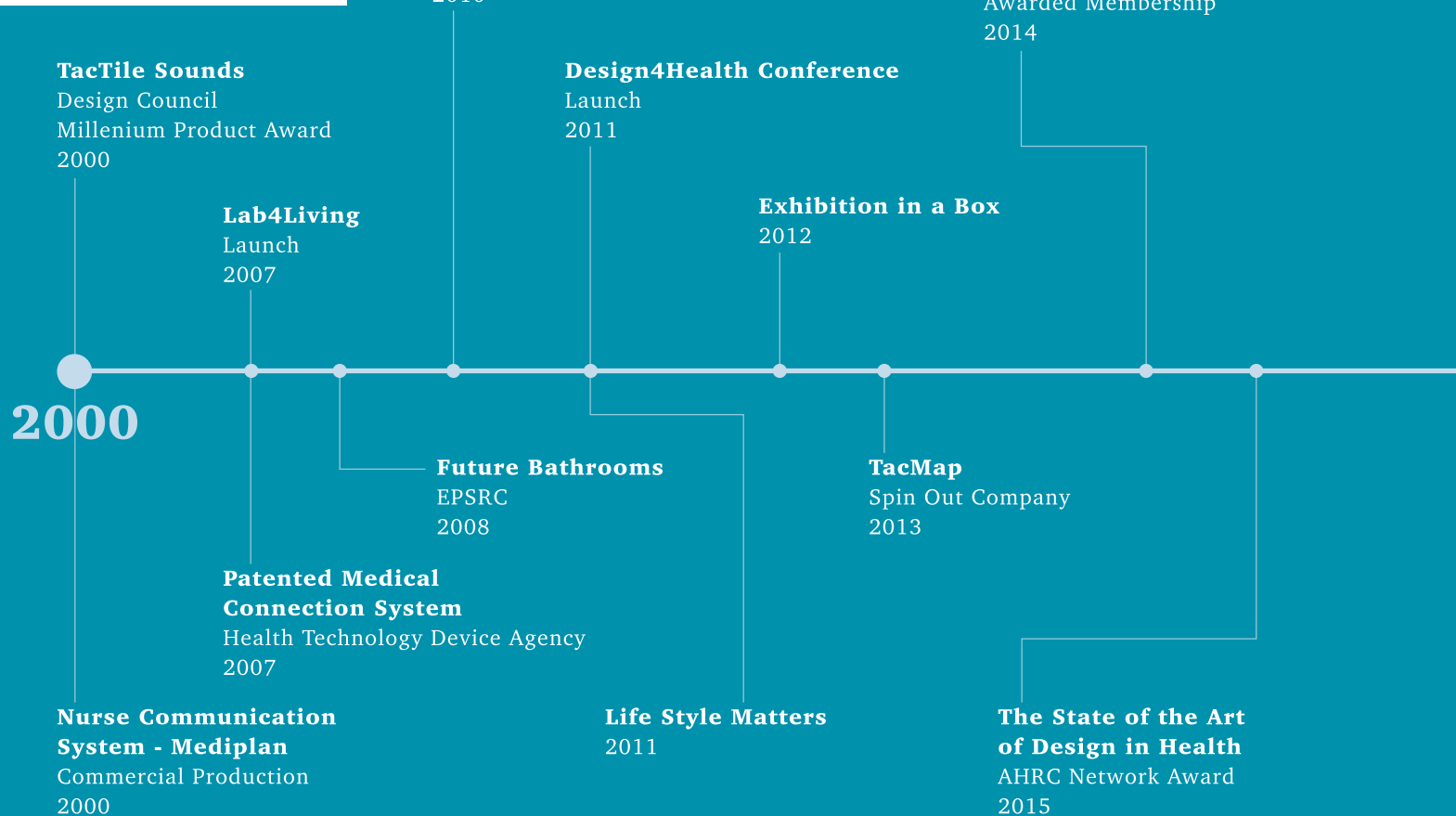


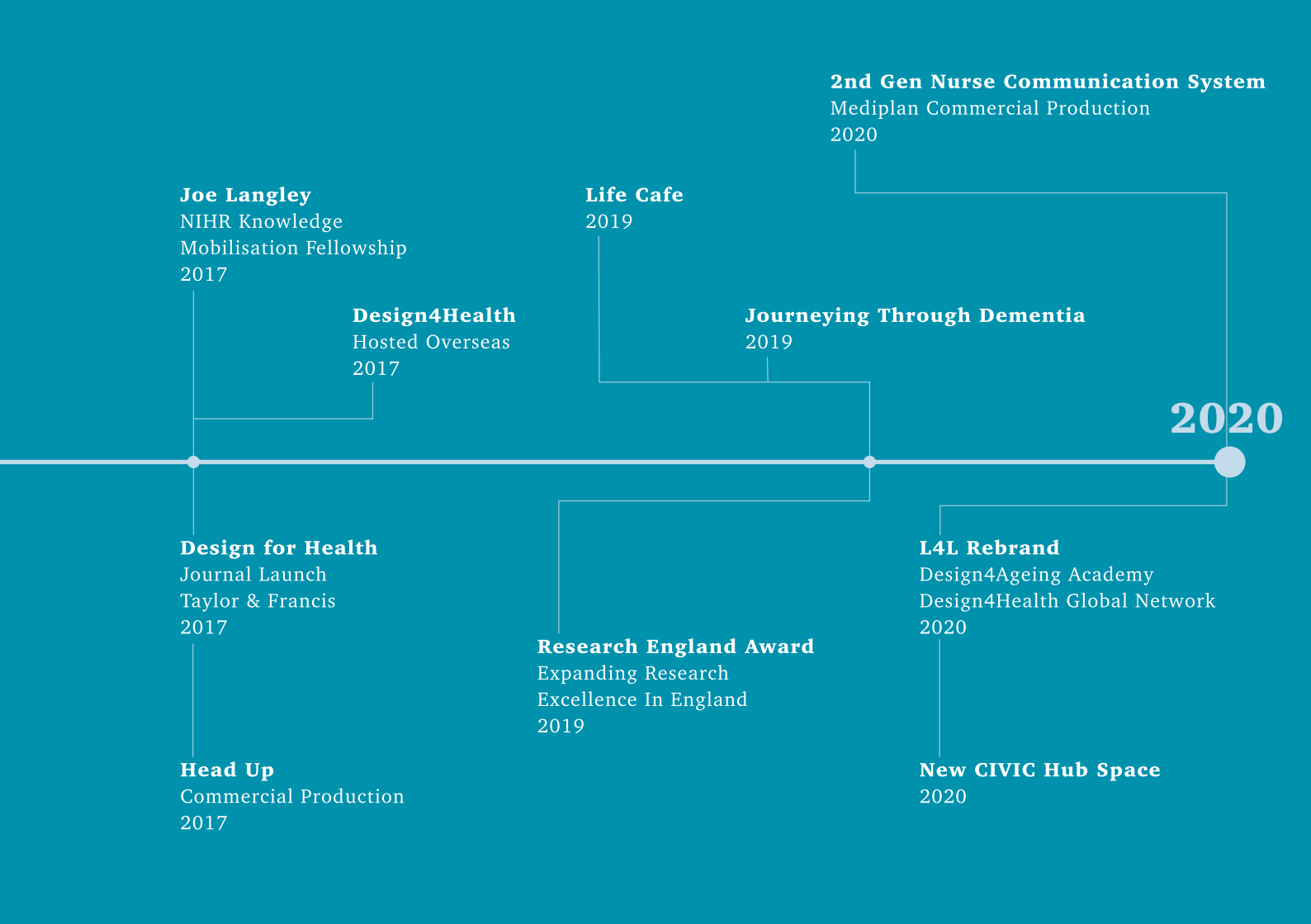
EXCELLENCE IN COLLABORATIVE DESIGN RESEARCH



Two Decades of Creative Design Research, Enhancing Quality of Life.

Lab4Living Timeline of Key Events/Projects





Joe Langley

NIHR Knowledge
Mobilisation Fellowship
2017

Design4Health

Hosted Overseas
2017

Design for Health

Journal Launch
Taylor & Francis
2017

Head Up

Commercial Production
2017

Life Cafe

2019

Journeying Through Dementia

2019

Research England Award

Expanding Research
Excellence In England
2019

2nd Gen Nurse Communication System

Mediplan Commercial Production
2020

L4L Rebrand

Design4Ageing Academy
Design4Health Global Network
2020

New CIVIC Hub Space

2020

2020

*Excellence in
Collaborative*

**DESIGN
RESEARCH.**

Lab4Living is a design-led interdisciplinary research group developed by a collaborative community of researchers that emerged from the Art and Design Research Centre at Sheffield Hallam University.

Over the last two decades Lab4Living has led a broad discourse about the value of design and creative practice in the field of design and health.

Formally established in 2007 the Lab is recognised by the sector for its world-leading research that informs the design of innovative products, environments, and interventions that promote wellbeing and quality of life throughout the life-course.

Professor Paul Chamberlain
(Lab4Living co-director)

Professor Claire Craig
(Lab4Living co-director)

**DESIGN
RESEARCH?**



Design informs and defines how we experience daily life.

The environments we inhabit, the products we use, the clothing we wear and the services we engage with are all shaped through design. When these designs correspond with our social, emotional and physical needs and capabilities then we are able to fulfil our aspirations and experience wellbeing.

However, when there is a poor match, the opposite is true. Therefore in the context of quality of life and wellbeing design research is fundamental.

*Eventually
everything connects
– people, ideas,
objects...the quality
of the connections
is the key to quality
per se'*

(Charles Eames)



L4L participant with 'Stigmas' collection.

- Chamberlain, 2010

*'... a plan for
arranging
elements in such
a way as best
to accomplish
a particular
purpose.'*

(Charles Eames)



L4L participant with 'Stigmas' collection.

- Chamberlain, 2010

Research:
*a process of
investigation
leading to
new insights,
effectively
shared.*

(Higher Education Funding
Council for England)

Lab4Living undertakes and applies design research to promote wellbeing and human flourishing.

We use design methods and skills to identify and formulate questions, to build understanding and create solutions.

Our approach allows us to understand who we are designing for, and provide clarity in defining the problem that we are working to resolve.

Research outputs are therefore broad in both application and reach, but targeted to ensure maximum impact.


*He with body waged a fight
But body won; it walks upright.
Then he struggled with the heart;
Innocence and peace depart.
Then he struggled with the mind;
His proud heart he left behind.
Now his wars on God begin;
At stroke of midnight God shall win.*

(W.B. Yeats from *Supernatural Songs*, 1934)



Photography in care homes.

- Craig, 2014

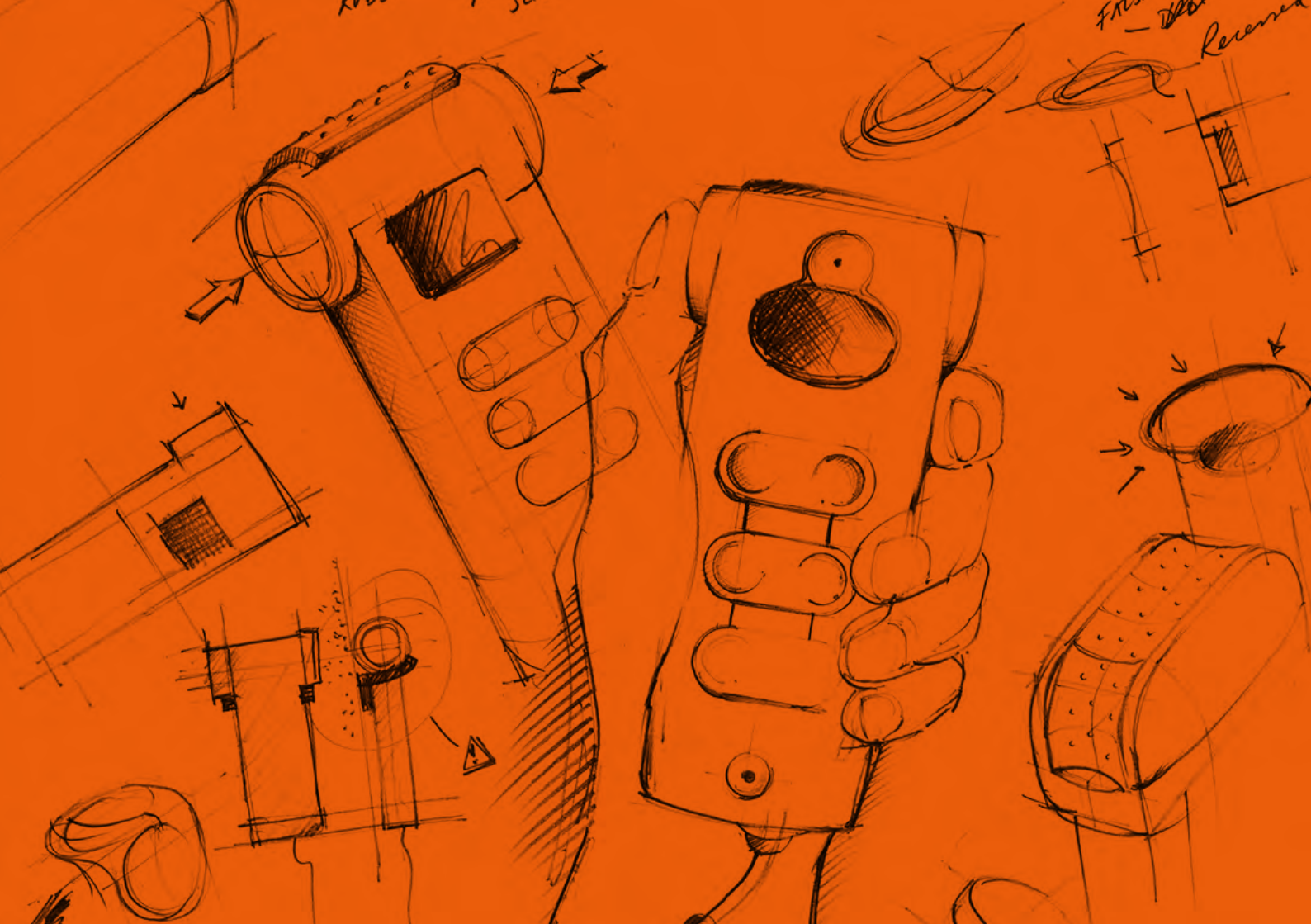


As more people live longer lives, this research led innovation in age related products, in new housing models, in furniture, fashion, and advancing technology, will continue to shape future society.

“Our vision is that as a result of our research a generation of individuals for whom the 100 year life is an increasing probability, will be enabled to lead longer, more productive and fulfilled lives.”

DESIGN

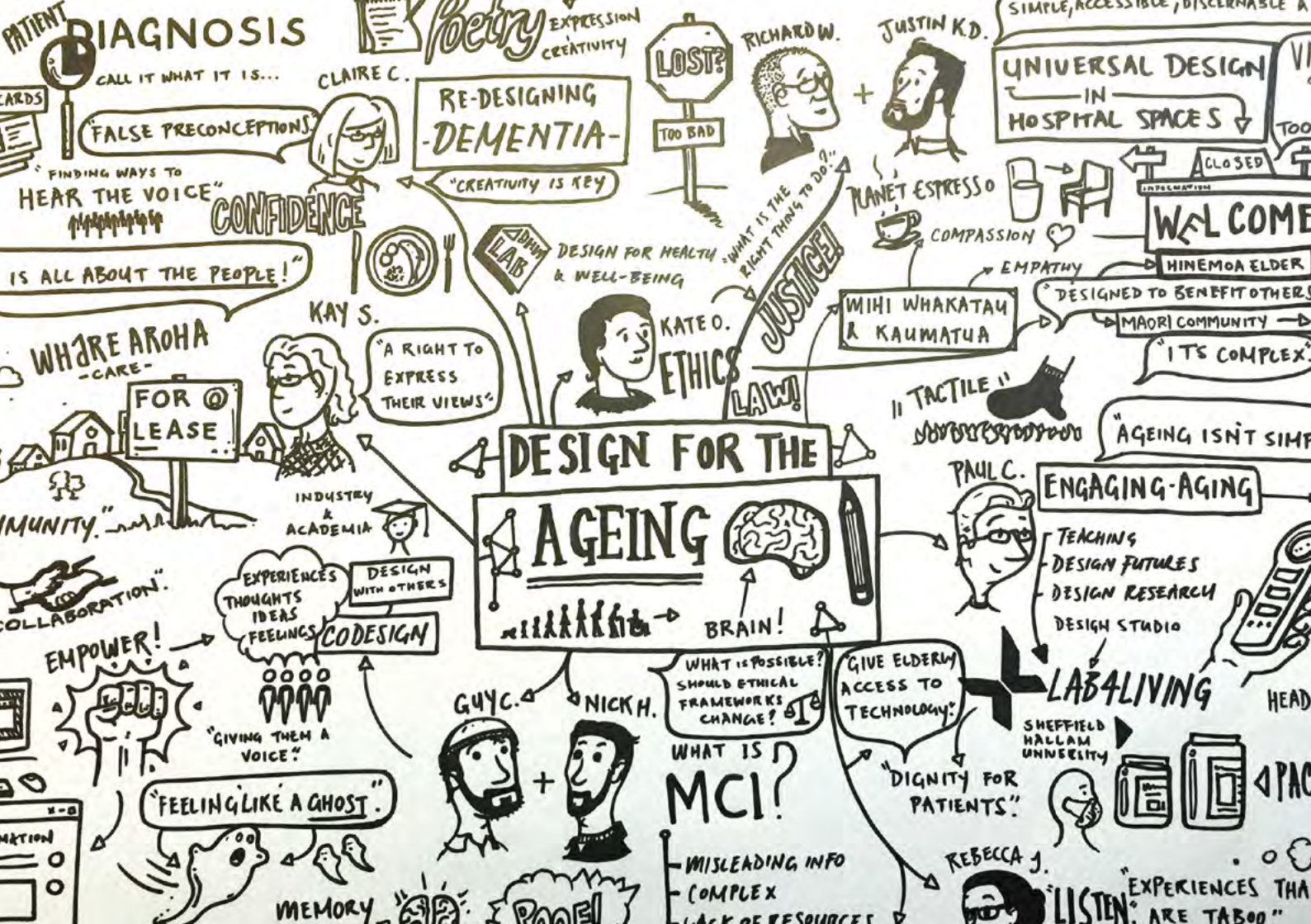
As Method.



We utilise design practice as method in our research. **For example, drawing, 3-dimensional modelling, pre-production prototyping, photography, film-making and exhibition** offer ways to visualize, examine, and build understanding of phenomena, offering a more reflexive, immersive approach through which to generate new insights.

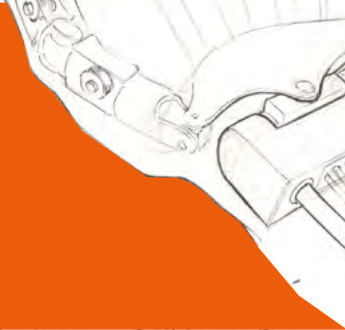
Design here is a process, a re-framing and re-imagining of situations and a way of seeking out questions and creating responses or solutions through an iterative and rigorous process.

*“Over the last two decades, Lab4Living’s approach has been formed by utilising a range of design practices as method, such as **drawing, building rigs, prototyping and exhibiting**”*



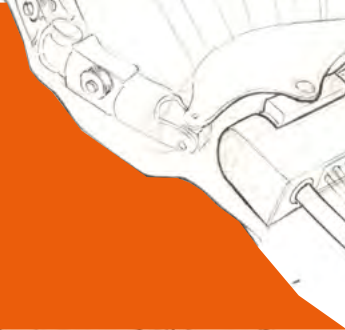
Drawing as Method

Drawing as method to investigate, document, communicate, and visualise. These methods can facilitate discussion, record information, and inform developmental processes.

A detailed technical line drawing of a mechanical assembly, possibly a part of a machine or vehicle, shown in a perspective view. The drawing is white on a black background, with various components like bolts, nuts, and structural parts visible.

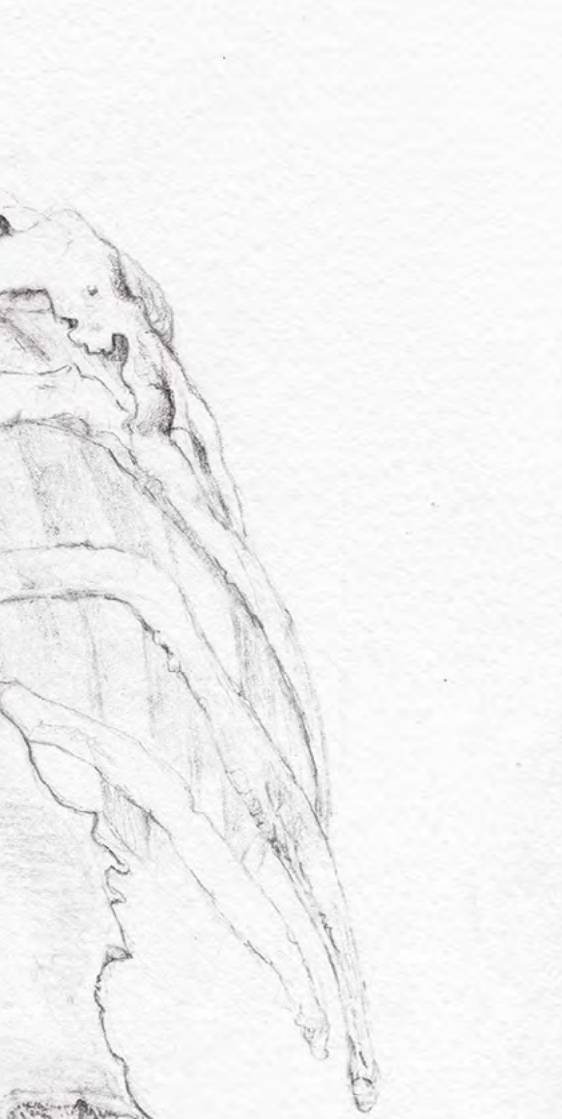
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*'In her enquiry
exploring the condition
Fibrodysplasia
Ossificans Progressiva
Lucy Lyons used
drawing as a
phenomenological
activity to gain new
insights into the disease
and understanding of
the phenomena.'*



Building Rigs as Method

At times our research involves working with vulnerable participants in safety critical situations. In these instances it is often necessary to build rigs to test out ideas and undertake the necessary refinement and checks prior to use with people.

Obstetric Airway Trainer

- Stanton, Reed - 2020



Obstetric Airway Trainer
- Stanton, Reed - 2020



Non Invasive Ventilation Mask.

- Willox, Rasyzk, Reed, 2019



Non Invasive Ventilation Mask.

- Willox, Rasyzk, Reed, 2019

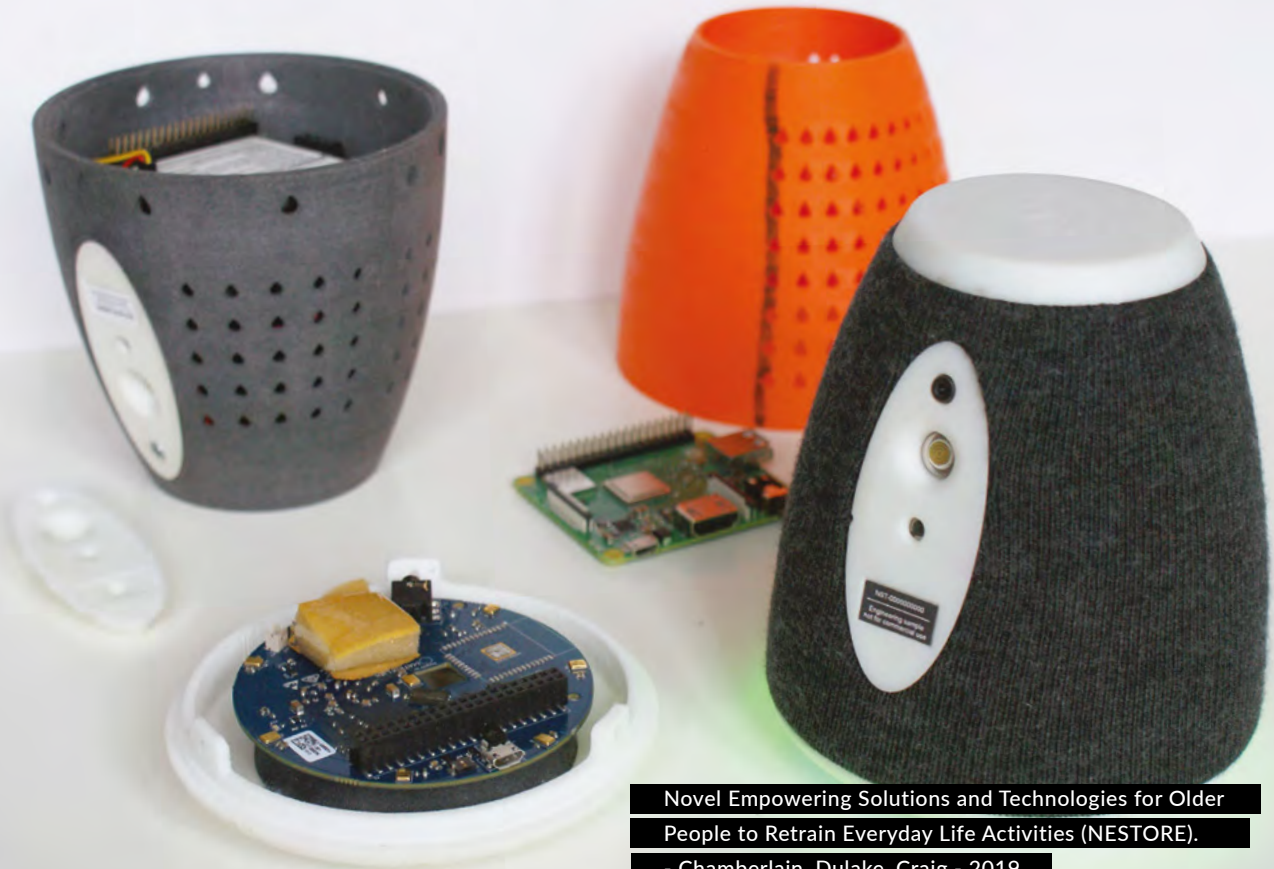
Prototyping as Method

Creating a 3-dimensional version of a product, a prototype can provide a tangible model that can be used to explore and test concepts.

2nd Gen Hospital Communication System.

- Phillips, Jones, Willox, 2020





Novel Empowering Solutions and Technologies for Older People to Retrain Everyday Life Activities (NESTORE).

- Chamberlain, Dulake, Craig - 2019



Gamified inhalers for school children.

- Stanton, Langley, 2017



Exhibition as Method

Key to Lab4Living's research is the role of objects, that do not necessarily present solutions but considered questions informed by data to create 'exhibitions' as prompts and a forum for conversation.

Part of the HOSPITAbLe collection.

- Chamberlain, 2017





HOSPITaBle exhibition Theatrum
Anatomicum, WAAG, Amsterdam.
- Chamberlain, 2017



Exhibition in a box.

- Chamberlain, Craig, 2012

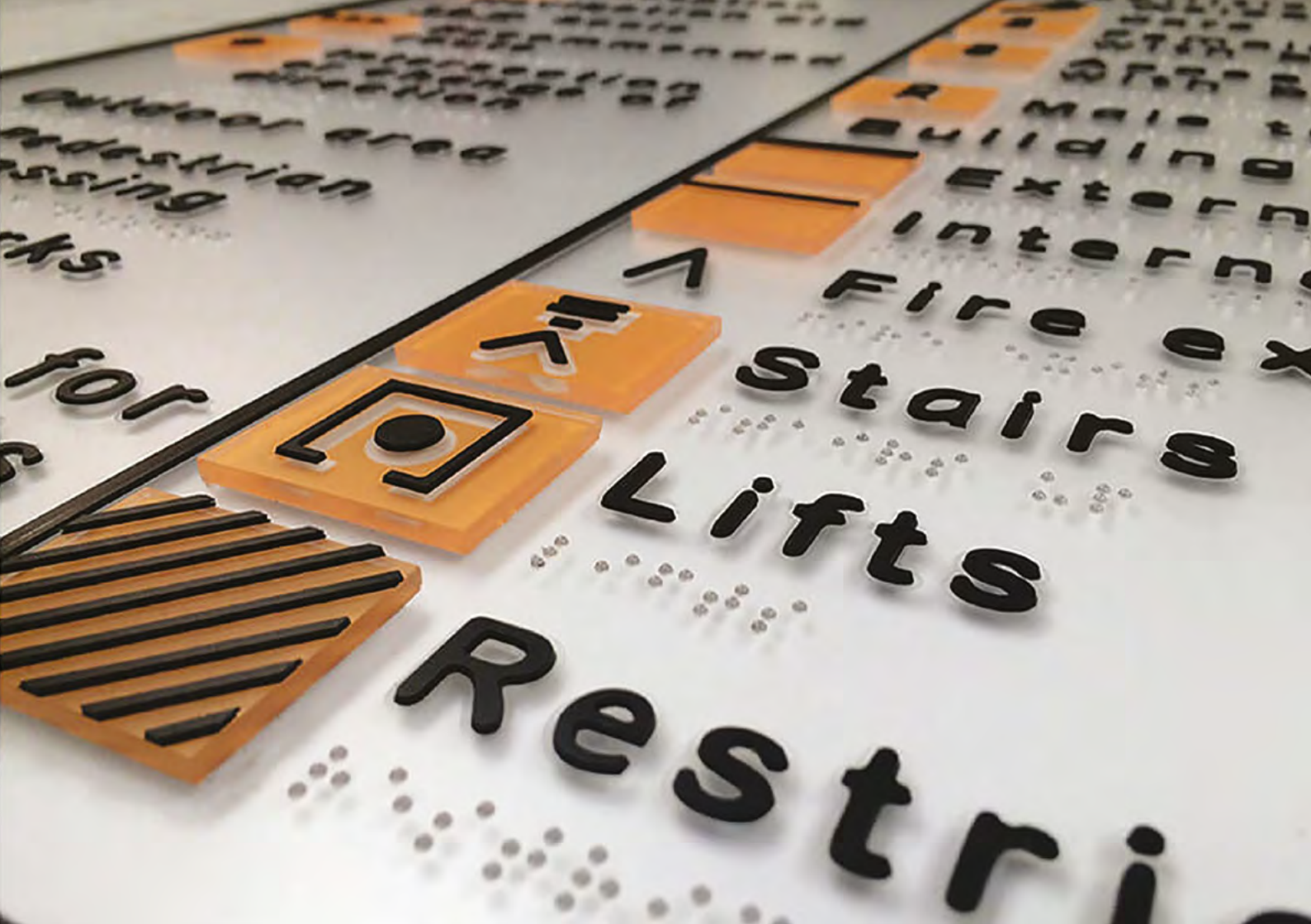


Stigmas collection.

- Chamberlain, 2010

DESIGN

Impact.



Over the last 2 decades Lab4Living has undertaken research that demonstrates the value of design in health. Our enquiry has been broad ranging from the role of design in problem framing (Chamberlain, 2012) through to ways that creative practice can act as a vehicle for knowledge mobilisation (Langley et al., 2018).

This work has led to award winning bathroom designs (Vitra, 2017); products recommended in government policy to support people with dementia (Scottish Government, 2018); and services commissioned by health authorities to maximise older people's participation in the community (NICE, 2008, 2015).

*The theme uniting all our research is the role of design in creating products, environments and services **where people can flourish.***

*'It was the first
time in a long time
that Philip was
able to sit across
the table and hold
eye contact'*

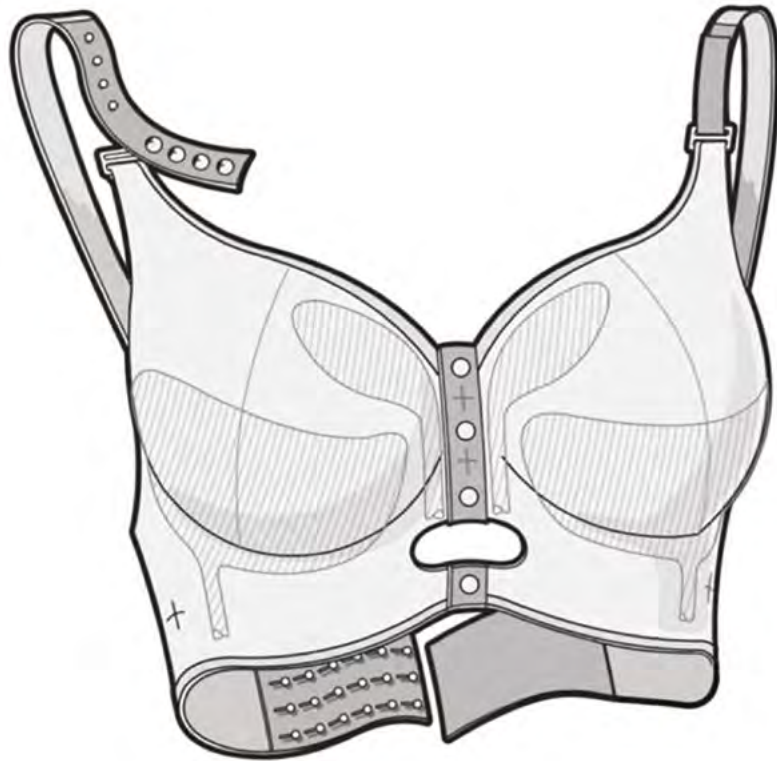
(Carol, wife of Philip
- Head Up Collar user.)



Support4All

Radiotherapy treatment for breast cancer requires precision and accuracy.

This research is concerned with the development of a novel solution for safer breast radiotherapy through the creation of a support bra, enabling reproducible positioning of tissue during breast irradiation treatment and helping maintain modesty and promote dignity.



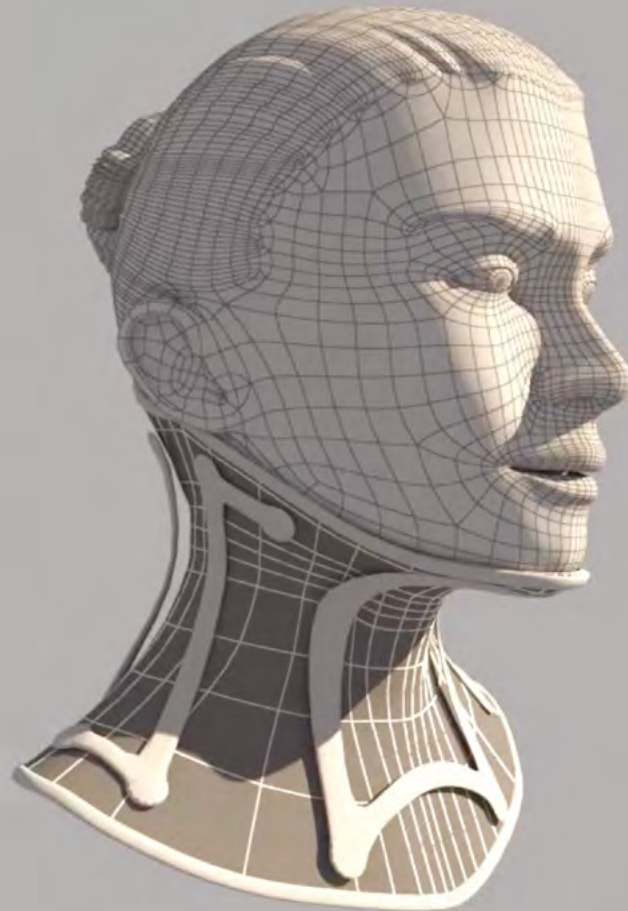


Head Up Collar

Motor Neurone Disease (MND) is a rapidly progressive neurodegenerative disease, with individuals developing weak neck muscles, leading to pain, and restricted movement.

This research built understanding of optimal requirements for a supportive neck collar with flexibility to allow functional head movement.

Through an iterative prototyping process the HeadUp Collar, a class one medical device, has been patented and manufactured.





*Development of
a garment to
replace existing
neck orthoses for
people living with
motor neurone
disease.*

The Life Café

The Marie Curie Funded research project Design to Care interrogated questions of meaning and care at end of life.

The artefact-led approach based on exhibition in a box resulted in the development of a set of curated creative materials named The Life Café.

These were found to be successful in enabling individuals to talk about meaning at end of life and have formed the basis of the Marie Curie campaign to promote conversations about end of life.

Craig, Fisher, Chamberlain - 2019





Future Bathroom

'Most Innovative Design' 2017.
Over 50s Housing Association,
UK.

Future Bathroom is included in
the recent NIHR Dissemination
Centre Themed Review 'Help at
Home'.

This image is taken from the
Vitra 'Inclusive Bathroom
Design As We Age' brochure
demonstrating a range
of products derived from
collaborative research
undertaken with Lab4Living.





*‘If I’d known then what I know now
I wouldn’t have done it like that.’*

(Research participant referring to the refurbishment of their own bathroom.)

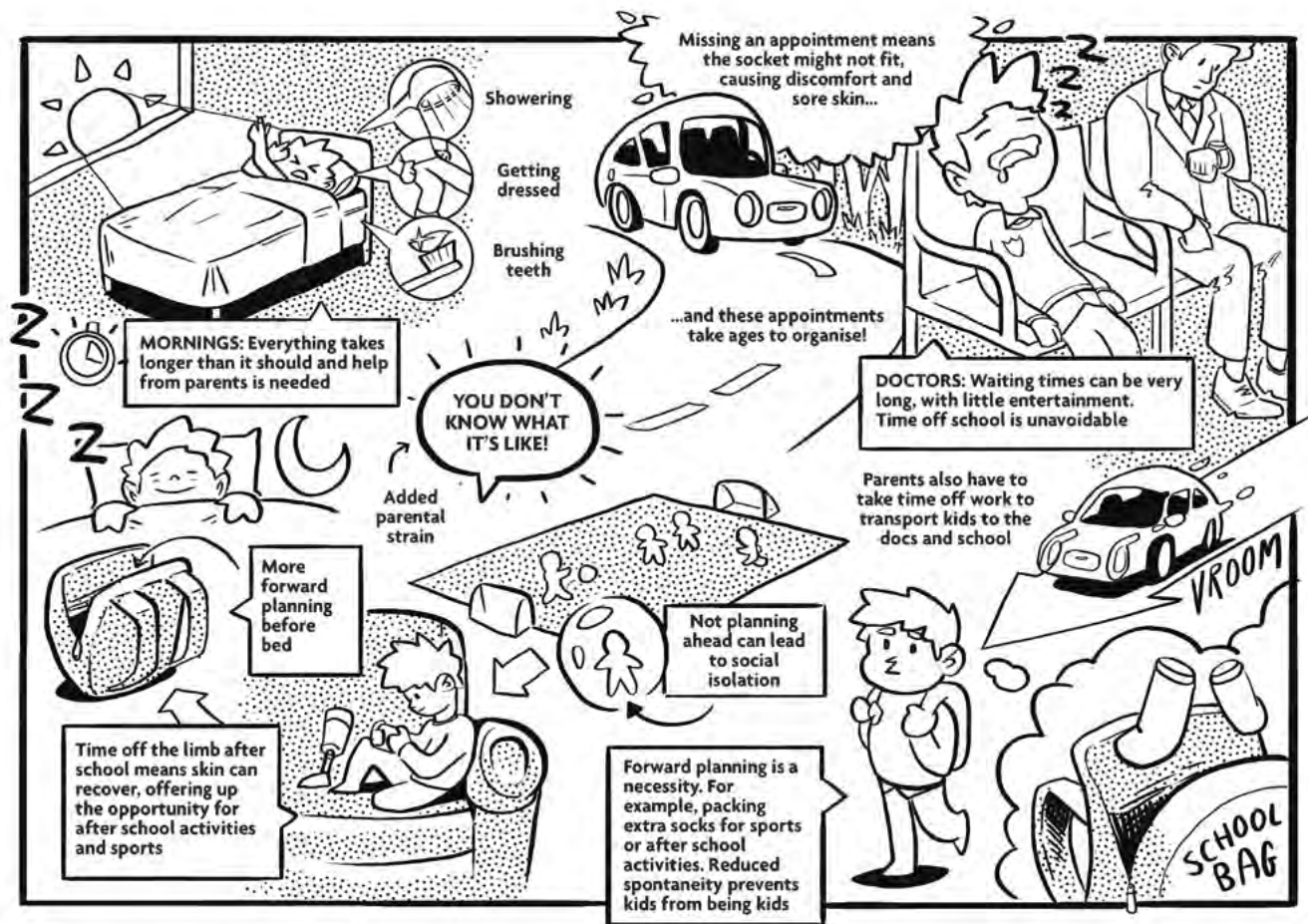
Starworks

The Starworks Network is a young people's prosthetics research collaboration utilising co-design methodology, bringing together children, families, experts in healthcare, academia and industry to creatively explore and address unmet needs in children's prosthetics.

The team provided co-design support in ten 'Proof of Concept' projects with multidisciplinary teams across the country, creating meaningful innovations to improve the lives of children and families.

Langley, Wheeler - Current





Journeying Through Dementia

Journeying through dementia is a design led research enquiry which interrogates the role of design and creative practice in post-diagnostic dementia support.

An iterative co-design research process has drawn on the insights of people living with the condition and clinicians to underpin the development of a set of curated creative tools to enable people to live well with dementia. The work is cited in the policy document, 'Connecting People, Connecting Support' which is part of the Scottish Dementia Strategy.





True

Playponics

This innovative research programme explores the role of design in developing frugal solutions in developing countries to promote wellbeing and quality of life.

The team developed new concepts for a suite of playground equipment through which to support hydroponic crop production.

Reed, Stanton - 2020





*It's a real privilege
to work alongside
communities across
the world, learning
from each other
and implementing
design-led research
solutions that
address some of the
global challenges
impacting on health
and wellbeing.*

RESEARCH

Communities...





Our city centre base fosters and supports a creative environment for interdisciplinary working, engagement with community groups, business and industry, and supports the university's civic agenda. We facilitate a diverse range of collaborative projects and provide a creative experience for our research team and doctoral students as well as international visitors.

These communal spaces and labs provide the resource and environment to deliver high quality research and help build the foundation for the next generation of designers working in this field.





- Dilys Price OBE.

Dancer, founder of Touch Trust, the world's oldest female sky diver, and L4L Design4Ageing ambassador.

Our research explores ways of drawing on the expertise of older people and specifically examines how to harness the breadth of experience, skills and insights they bring to this design research space. The research recruits a generation of older makers, designers, artists and creative practitioners to form the **Design4Ageing Academy**.

Individuals are offered the opportunity to identify and lead research projects that focus on the design of products and services for present and future generations. A set of principles and practices developed in partnership with the group and a model of engagement created aims to support other groups hoping to achieve similar ambitions.

Lab4Living fosters creative collaborations with individuals, communities and businesses both locally and globally. We utilise our resources and networks to engage in design sprints and short design challenges but many of our relationships have been nurtured and span over decades.

The **Design for Health Global Network** promotes a global community of design researchers working in the context of health and wellbeing. The network advances the theory and practice of design-led research in health by building an ecosystem to share knowledge and promote critical discourse.



L4L co-directors at Auckland University of Technology



Ankle Foot Orthosis.

- Dulake, 2014

Lab4Living holds a unique position as a design-led academic research group focusing on health with in-house expertise across design, production and manufacturing with long established links to a large portfolio of industry partners and clear pathways that take research informed products to market.



Locally we work in partnership with community groups, hospitals, cultural, academic, charitable and industrial organisations. Together we are united by a shared interest and passion in exploring how design and creative practice can promote wellbeing, improve health and impact positively on quality of life.

The Lab is well positioned as it sits within a region renowned for its industry and for developing new materials and methods of production which have been key to the UK economy over the last century.

*Every day our work explores how design research
and creative practice can promote wellbeing,
improve health, and positively impact life quality.*



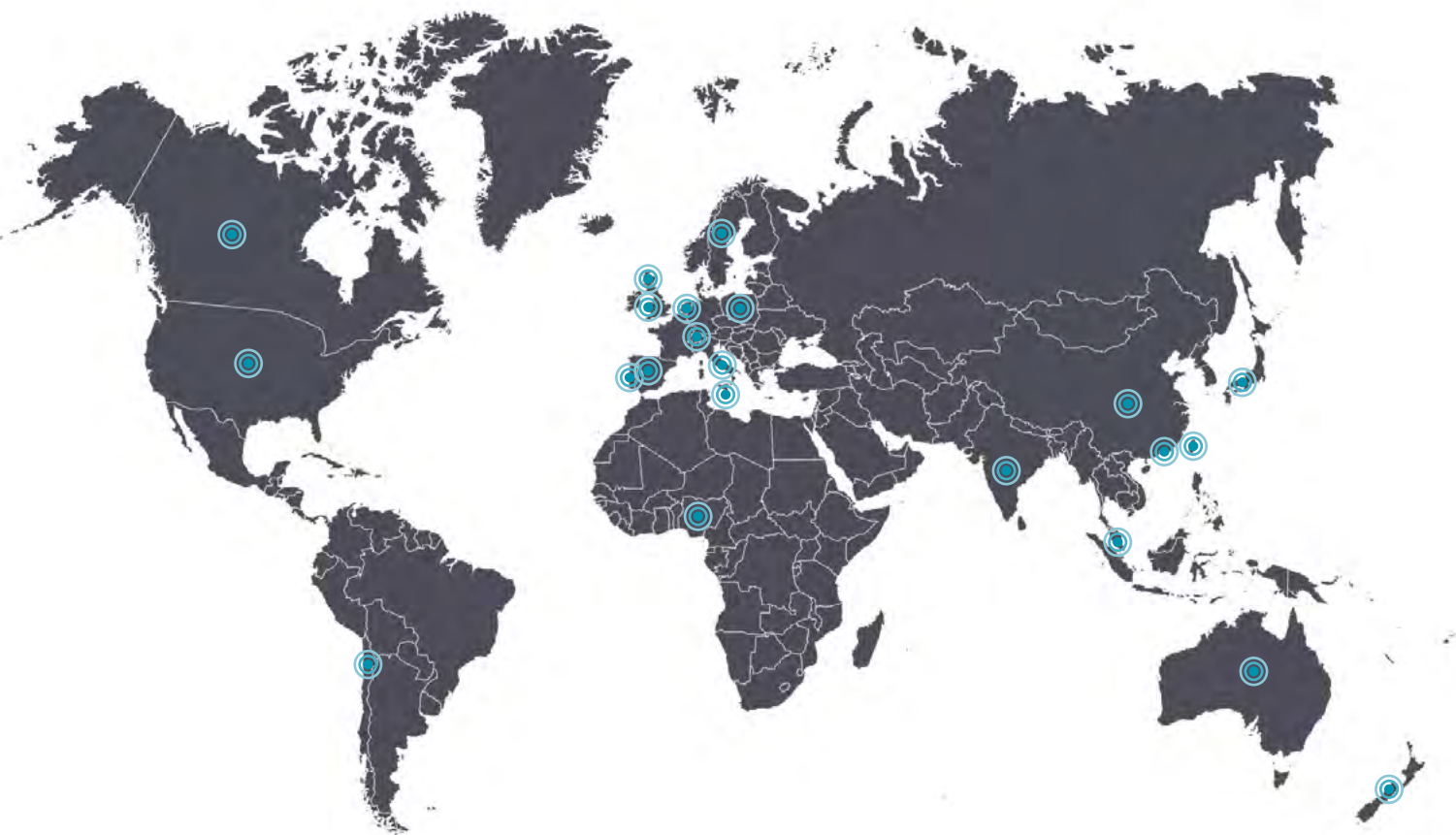
Internationally we are part of the European Network of Living Labs and have strong partnerships in over 20 countries including China, Australia, New Zealand, Canada, and the Netherlands.

These collaborations have enabled us to extend the reach and impact of our research. As a consequence the value of design has been recognised and is included in the health curricula of a number of international academic institutions.





We share our research within our own academic disciplines through input into professional bodies and specialist interest groups.



National & International locations of our partners.

The Netherlands

Malta

Poland

Scotland

Wales

India

USA

Sweden

Taiwan

Japan

Singapore

Italy

Spain

Switzerland

Canada

Australia

New-Zealand

Hong Kong

Portugal

China

Nigeria

Chile

We lead research and partner with colleagues in design, creative practice and health on a national and international level.

*Our engagement takes many forms and includes **advising government** and contributing to on-going academic discourse.*

DESIGN

4 Health.





Welcome to the
DOUBLE Launch of:
Double Agency
+++++ & +++++
the *Critical* Arts
In Health Network
(CAHN)



We actively seek different ways to connect with our community of practice. Through a series of events and publications we have pushed boundaries and created new spaces which bring our community together, share knowledge and learn from each other.

The biennial Design4Health conferences established by Lab4Living in 2011 enable us to explore practice,

research and creative responses to issues through peer reviewed presentations, posters, exhibitions, workshops and inclusive design challenges.

Participants value the diversity of the community and the supportive environment in which to explore new methods and approaches.

The official peer reviewed proceedings of each conference are published online.

The Design4Health conference has been held in the following locations:

2011 - Sheffield
2013 - Sheffield
2015 - Sheffield
2017 - Melbourne
2018 - Sheffield
2020 - Amsterdam





*The role of exhibition to **promote discourse** as well as disseminate research is a key component of the Design4Health conference.*





*Research undertaken
by Lab4Living
(Chamberlain et al
2014) funded by the
AHRC, highlighting
the dearth of vehicles
to publish and share
research, has led to
the Design For Health
Journal published by
Taylor and Francis.*

Kirsty Christer, Assistant Editor Design For Health Journal

Design For Health is the international refereed journal covering all aspects of design and creative practice in the context of health and wellbeing.

The journal, edited by Lab4Living's Chamberlain & Craig, provides a forum for design and health scholars, design professionals, health-care practitioners, educators, and managers worldwide. Design For Health is the official journal of the Design4Health conference and publishes selected papers from each event.

Its aims are to publish thought-provoking work based on rigorous research and invites high quality, original submissions that make a contribution to knowledge and practice in the context of the design of health products, services, and interventions that promote dignity and enhance quality of life.

The Journal is published three times a year by world-leading academic and professional publisher Taylor & Francis Online, and was launched in Rome in 2017.

STAY
in Touch

Visit us at www.Lab4Living.org.uk

Find out more:

www.Design4Health.org.uk - www.Design4AgeingAcademy.org - www.Design4HealthGlobalNetwork.org

Design For Health journal: www.tandfonline.com/rfdh

Follow us on Instagram & Twitter: @Lab4Living

**Sheffield
Hallam
University**



*Lab4Living is a veritable treasure trove
of extraordinary, cutting edge projects.*

An Aladdin's cave.

*You are one of the best kept secrets
of the research world!*

(Visitor)



Lab4Living is a leading design research group promoting dignity, and autonomy, through collaborative participation methods in design, health and creative practice.

Underpinned by excellence in research, we develop products, services and interventions, adopting a sustainable and holistic approach to enhancing quality of life.