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Prof. Paul Olomolaiye

Pro Vice-Chancellor and Executive Dean
Faculty of Environment and Technology



Once again this year our final year product design students have combined their creativity with leading-edge technology and enterprise to present you the products at this exhibition. The design solutions on show are not only functional and aesthetically 'a delight' but meet the requirements of the marketplace.

I am very pleased at the achievements our graduating students and confident that as part of the creative economy they will make a strong contribution to the well-being of our society for years to come.

Our university is a partnership university. This year's graduating students have worked with several of our industrial partners in developing design solutions for real world 'live' challenges. We believe that this experience is essential in preparing our students for the world of work and beyond.

We are proud of their passion to approach living from new perspectives and fully commend each project at this exhibition to you.

Andrew Batchelor

Associate Head of Department

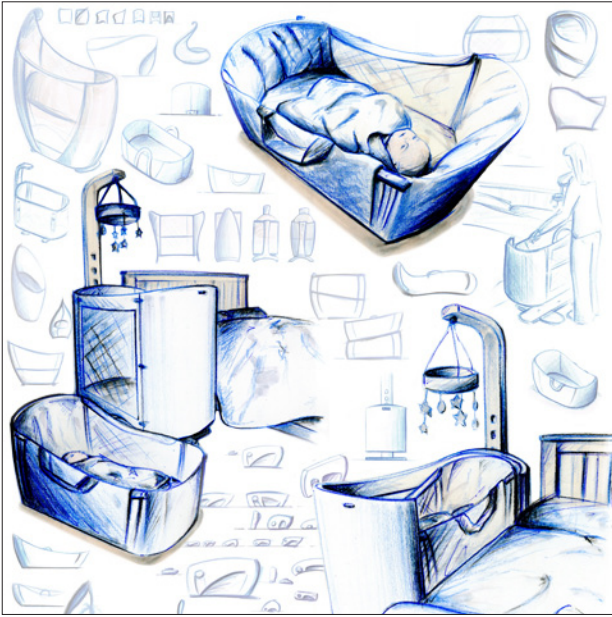
Product Design Cluster

Welcome to this celebration of the dedication, creativity and hard work of our graduating students.

This year's exhibition is centered on the theme of 'Make' which describes the nature of the creative and applied problem solving across our programs. The combined work in this catalogue shows a broad cross-section of the investigations and design solutions that address some of the issues that our society is facing today. The products and services proposed by our graduates demonstrate outstanding competence in research, critical analysis, design synthesis, design engineering, service design, brand development, service mapping and human-centered design.

On behalf of this year's graduates I would like to extend a deep appreciation to the product design and technical team for their passion and their contribution to the students' learning. Your dedication has enabled them to reach a high level of excellence during their design education that is reflected in the work presented in this catalogue.

We congratulate our graduating students for their hard work and wish them every success in their careers and welcome them to our family of successful alumni.



Creative Product Design

The CPD course incorporates a wide array of design skills and knowledge necessary for product development in today's fast paced society. These areas of study include design research, marketing, business, design communication, design development, graphic design, packaging design and service design.

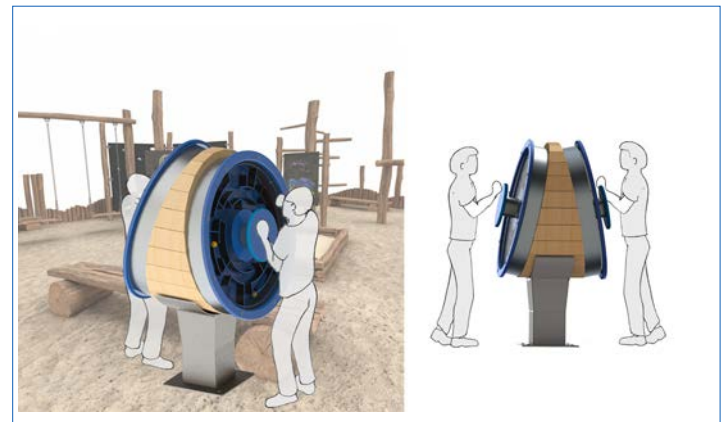
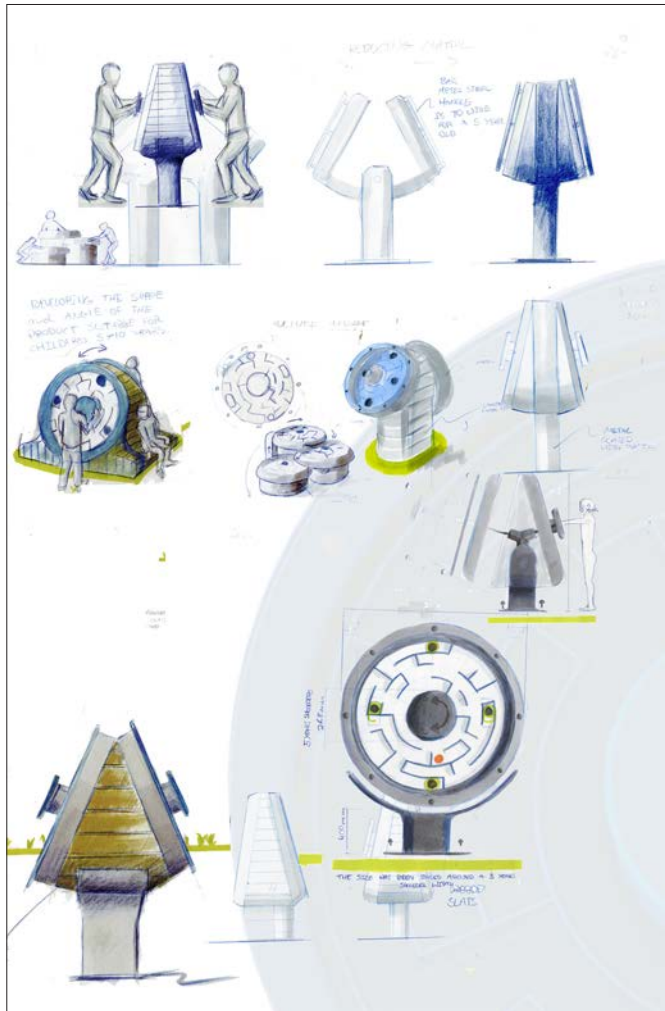
Jack Lindsey Anderson

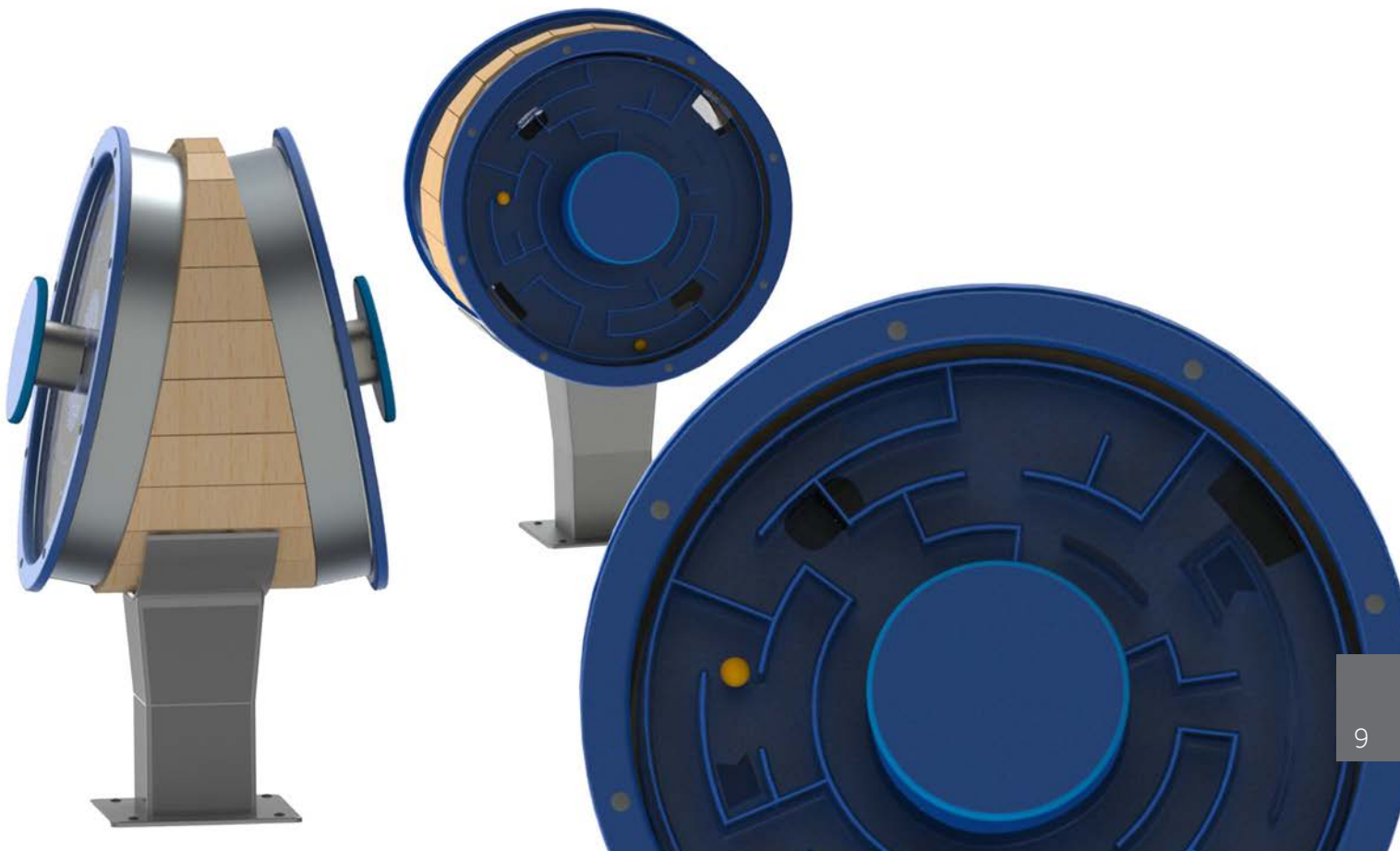
Creative Product Design

jackandersonreturns.wix.com/lumberjack

Individual Project: The Omaze.

The Omaze fosters social interaction in primary school playgrounds for children diagnosed as being on the autistic spectrum. The product structures turn taking between two participants by attempting to direct the balls through the maze and down the holes where it rolls into the opponent's maze. The product promotes innate strengths such as the ability to solve visual puzzles and develops socialising skills at a young age young age.





Jake Bond

Creative Product Design

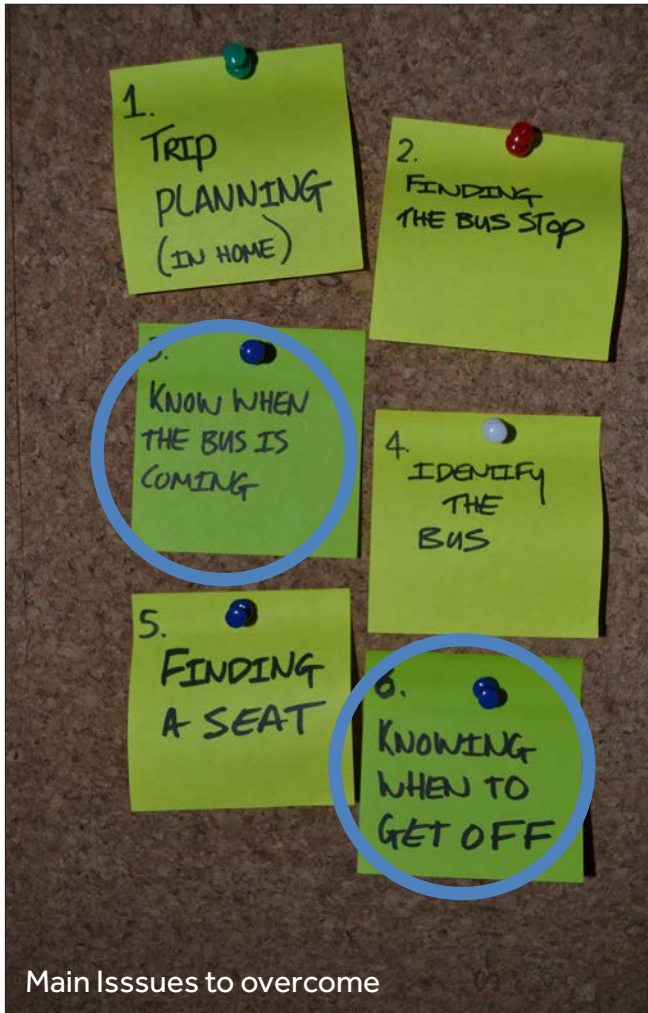
Placement: Ionic Systems



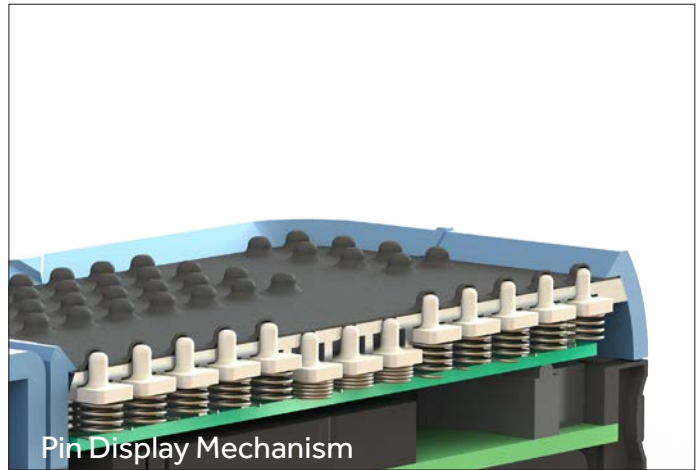
www.jakebond.co.uk

Individual Project: T.O.M

T.O.M is an assistive device targeting the visually impaired. Its aim is to enrich the experience of bus travel by eliminating the barriers that make it difficult to travel independently on foot and by bus. It provides an unbroken chain of discretionary information and utilizes the senses of touch and hearing, giving the user the reassurance travel confidently.



Main Issues to overcome



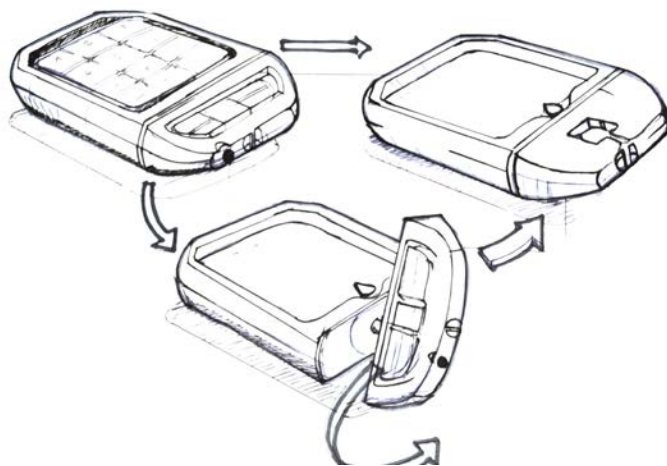
Pin Display Mechanism



User Testing

TOM

Inform to Explore





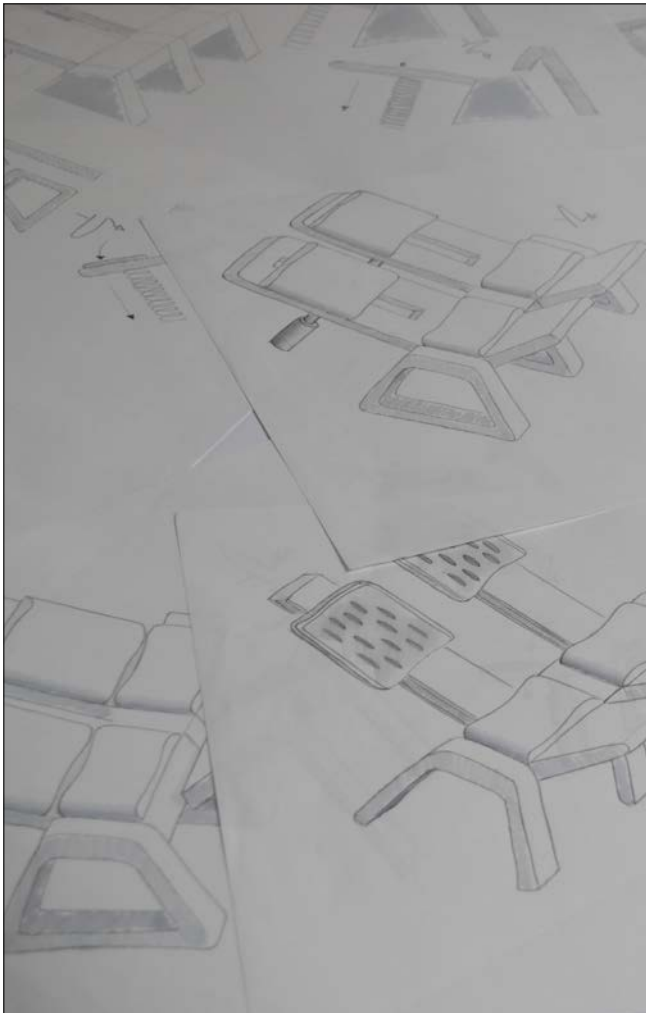
Andrew Carter

Creative Product Design

Freelance work:
Duncan Iracci

Individual Project: The Ex-So Bench

The Ex-So Bench provides a platform for social exercise. Designed to combat the development of osteoporosis, it's bench-like appearance makes it more approachable than the modern, generic exercise equipment. It provides the user with a method of exercise as well as a social experience.





James Castro-Griffiths

Creative Product Design

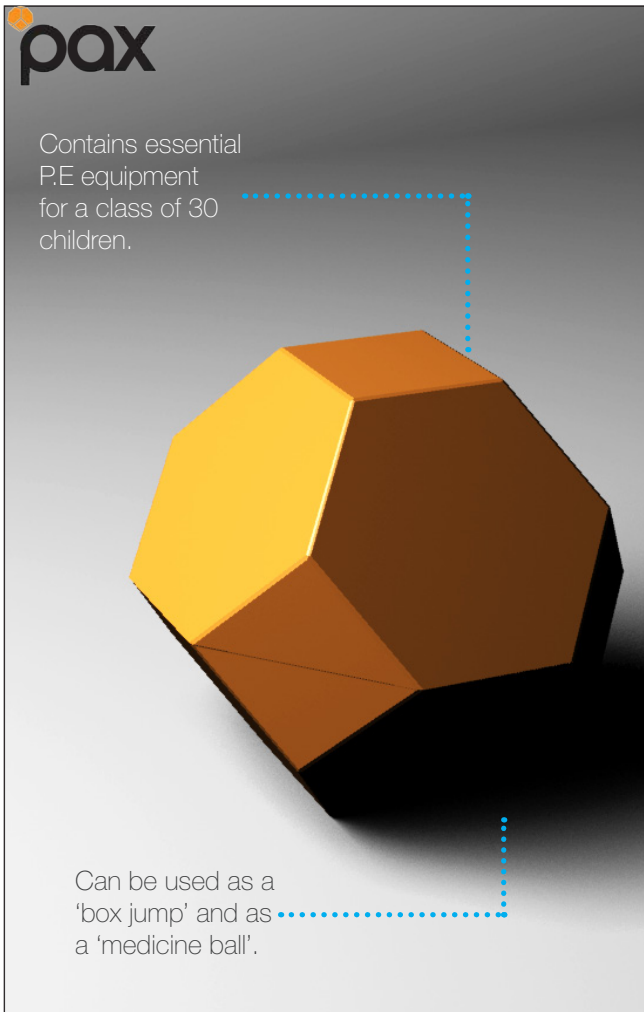


www.jamescastro.co.uk

Individual Project: Motivating Children To Exercise

Children need to be passionate about being active, so that they can take that feeling with them throughout their lives.

Pax is a product and a service that gives children an exciting and adaptive P.E. lesson, that can be simply taught by anyone, regardless of previous experience.





A CHILD WILL RISE TO ANY PHYSICAL
CHALLENGE YOU GIVE THEM, ALL
WE HAVE TO DO IS HELP.

enact 

Duncan Crosse

Creative Product Design

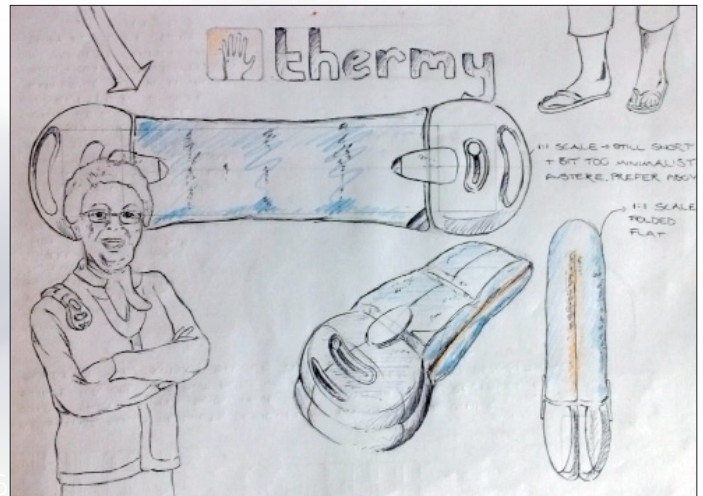
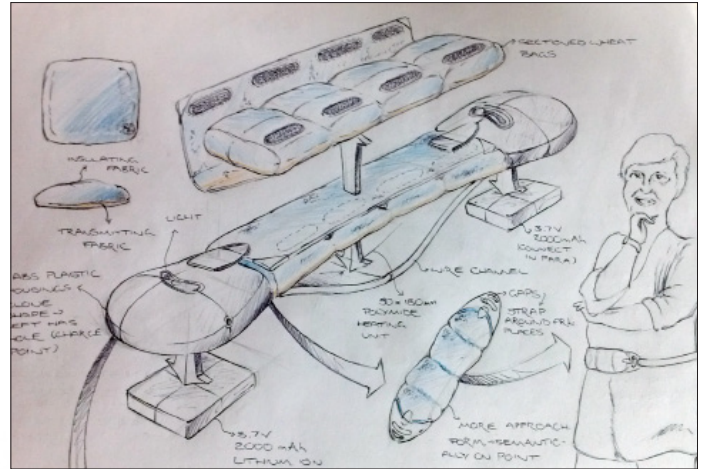
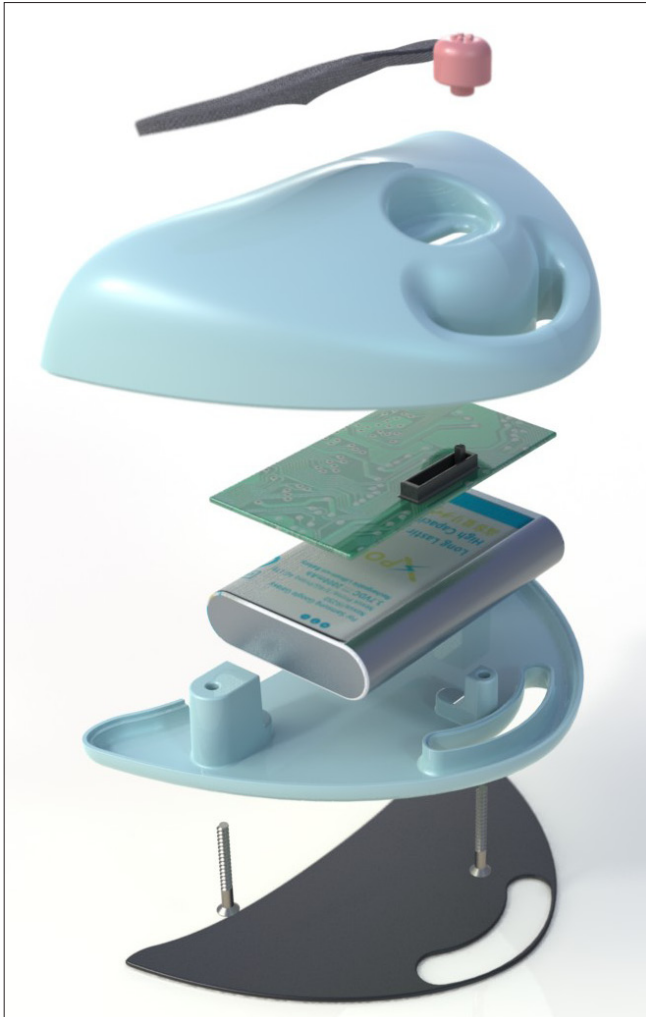
www.duncancrosse.wix.com/dncdesigns



Individual Project: Therm

Heating joints is a medically proven method of increasing circulation. Therm is a portable, rechargeable form of heat therapy which provides 2 heat settings to ease pain and improve range of movement in arthritic joints.

Therm is the first product to provide effective coverage to a multitude of joints while simultaneously allowing effective heat therapy anywhere, anytime.





Amber Cunnington Individual Project: KitchenMinder



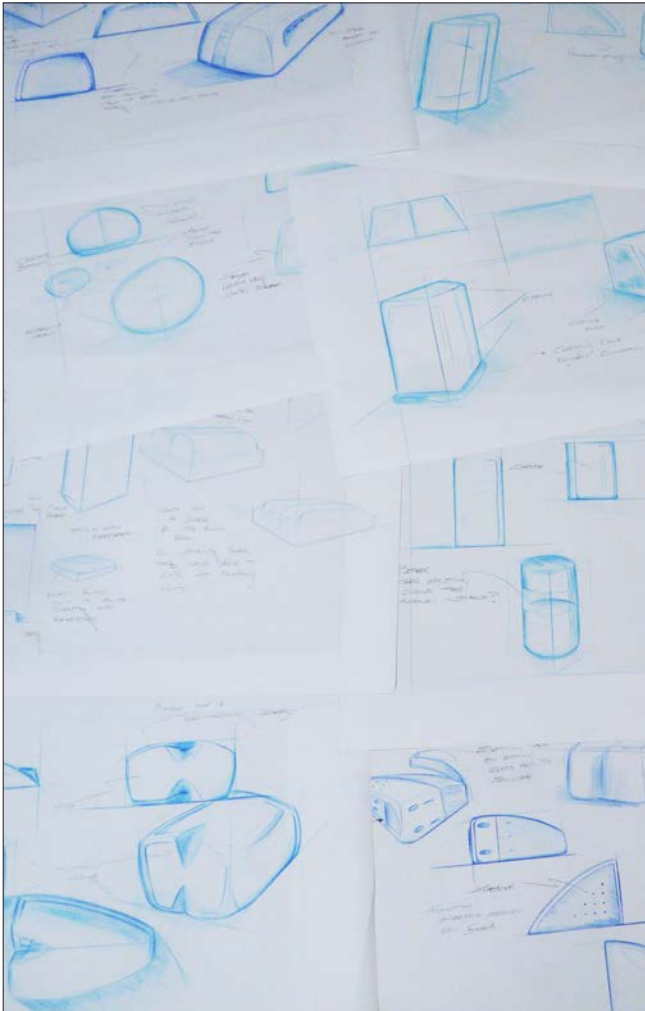
Creative Product Design

Summer Placement:
SeftonHornWinch

ambermariecunnington@hotmail.co.uk
www.coroflot.com/ambercunnington

The KitchenMinder is designed to reduce unintentional injuries as a result of scalding in under fives. Sensor pods sit on the worktop and use infrared beams which trigger an alarm if a child reaches into a dangerous area. The design reinforces verbal education and boundaries set by parents and encourages parents to maintain good practise.

Design for Manufacture: Folding Step Stool





Hugh Doran

Creative Product Design



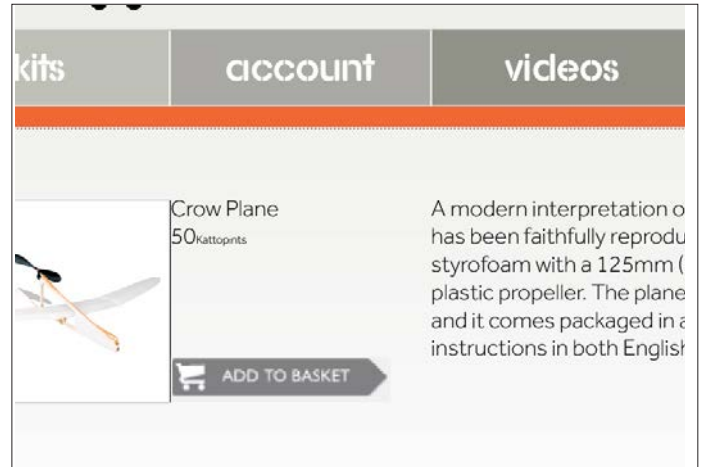
hughdoran@icloud.com

Individual Project: KattoBot

KattoBot is an automated cutting tool, aimed at children/ and young teenagers. It gives the user the opportunity to make high quality projects, or "KattoKits".

Kattobot utilises reflection sensors to find its way along the cutting line of a Kattokit.

The cut parts can then be assembled to form a wide range of projects available on a dedicated website.





 **katto**

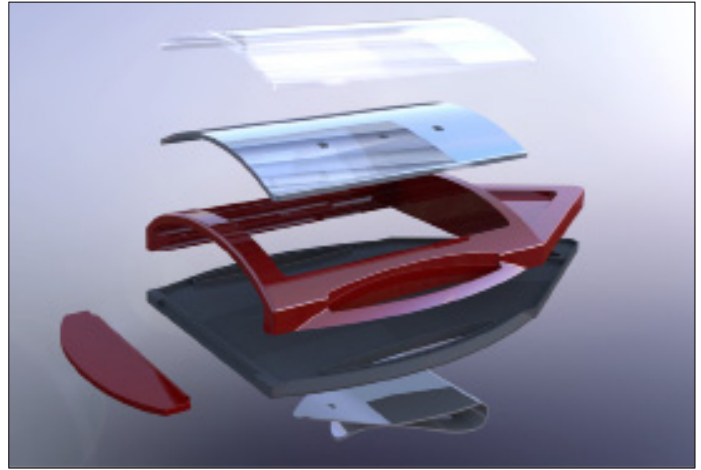
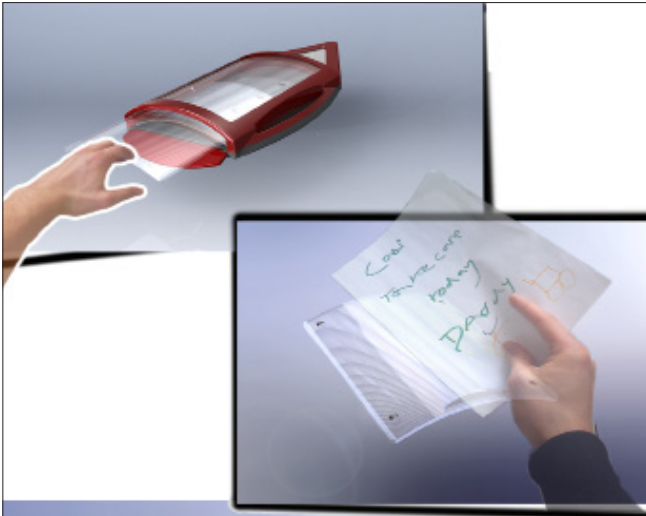
Duncan Evans

Creative Product Design



Individual Project: FarmSafe

FarmSafe is a practical solution to increasing the awareness of health and safety on our farms. The product encourages the family and loved of farmers to create their very own personal and meaningful safety messages to display around the farm.





Ryan Foat

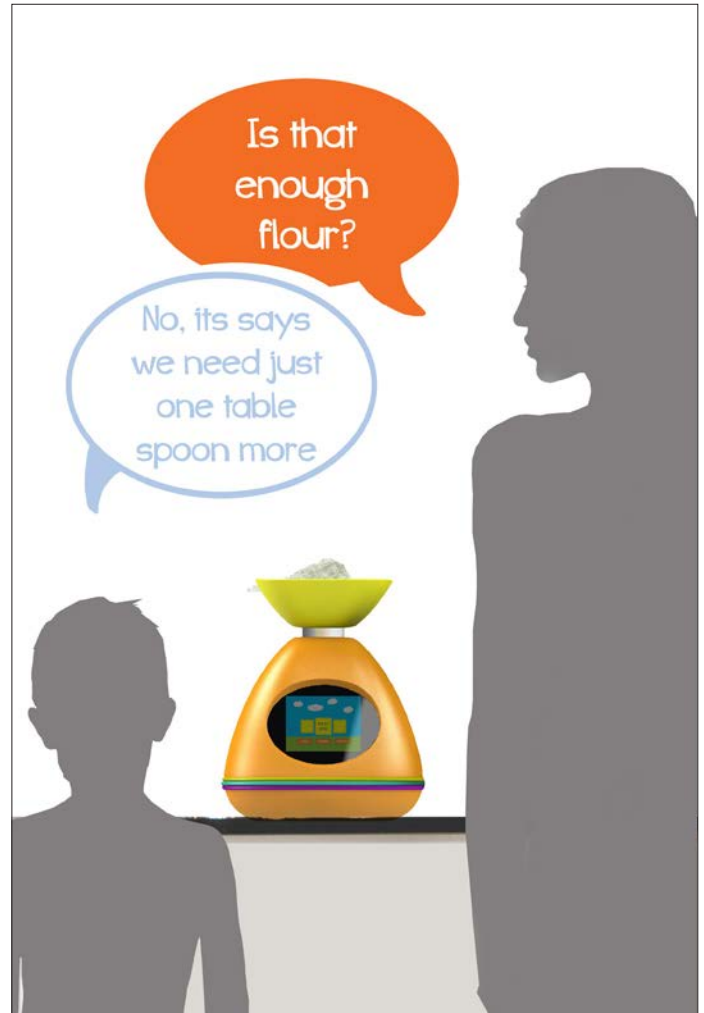
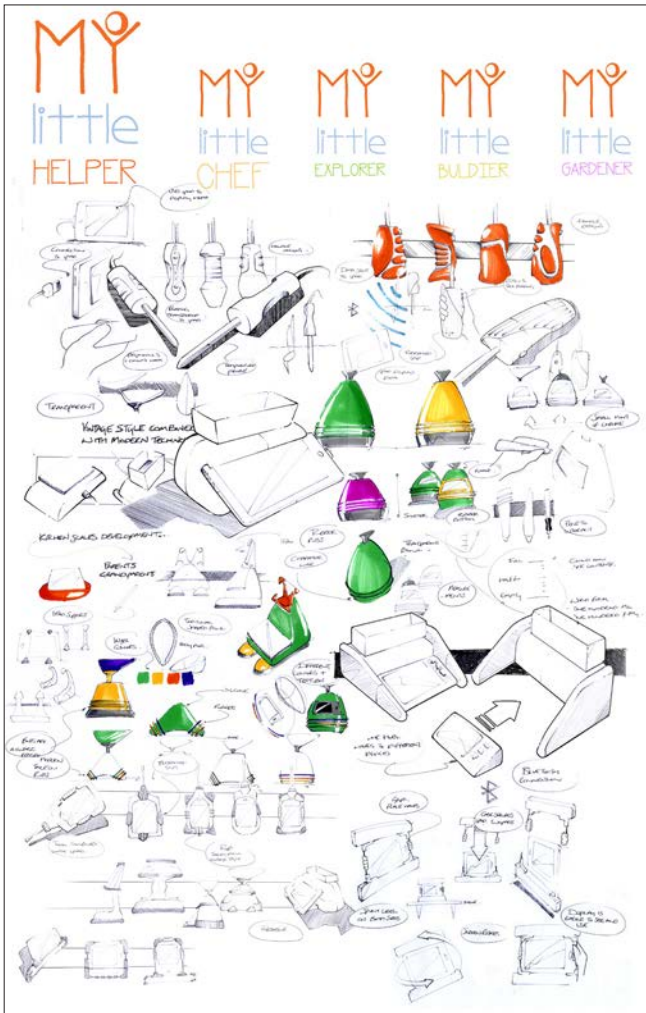
Creative Product Design



www.coroflot.com/ryan_foat

Individual Project: My Little Chef

My Little Helper tackles child illiteracy by bringing reading for the child into everyday activities that are carried out by parents. Using tools such as kitchen weighing scales to collect data, it transfers measurements into readable phrases and instructions that the child can understand and pass on to the parent. This makes reading a paramount part of the activity and creates a reading habit that can occur daily.



MY
little
HELPER

Bring reading into your world



Matt Granger

Creative Product Design

Placement:

Numatic International

www.mattgranger.co.uk



Individual Project: Sole Search

Sole Search is a system designed to work in partnership with smart devices in order to reduce the 6,000 unnecessary diabetic amputations that happen across the UK each year.

The impact wrench shown was completely reverse engineered; ergonomically improved and then presented to Marussia F1 Team by myself in November 2012.





Ben Holmes

Creative Product Design



bholmes88@hotmail.co.uk

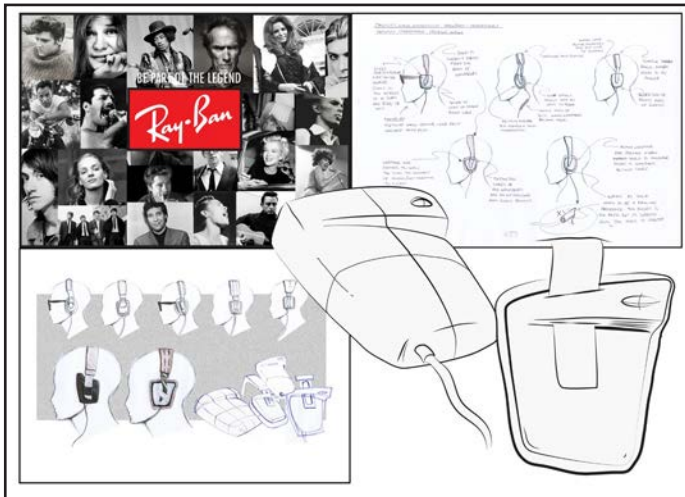
bholmes88.wix.com/benholmesdesign

Individual Project: Oncore

Oncore has been designed to enhance the live music experience for people with hearing impairments. Working wirelessly, Oncore translates live sounds into vibrations so the user can feel the performance. It has been created to encourage the attendance of deaf people at music festivals.

Product Line Extension: Ray-Ban Headphones

An electronics range designed round sound and vision based on the iconic Ray-Ban Wayfarer sunglasses.



FEEL THE PERFORMANCE

 **oncore**





Estyn Jones

Creative Product Design

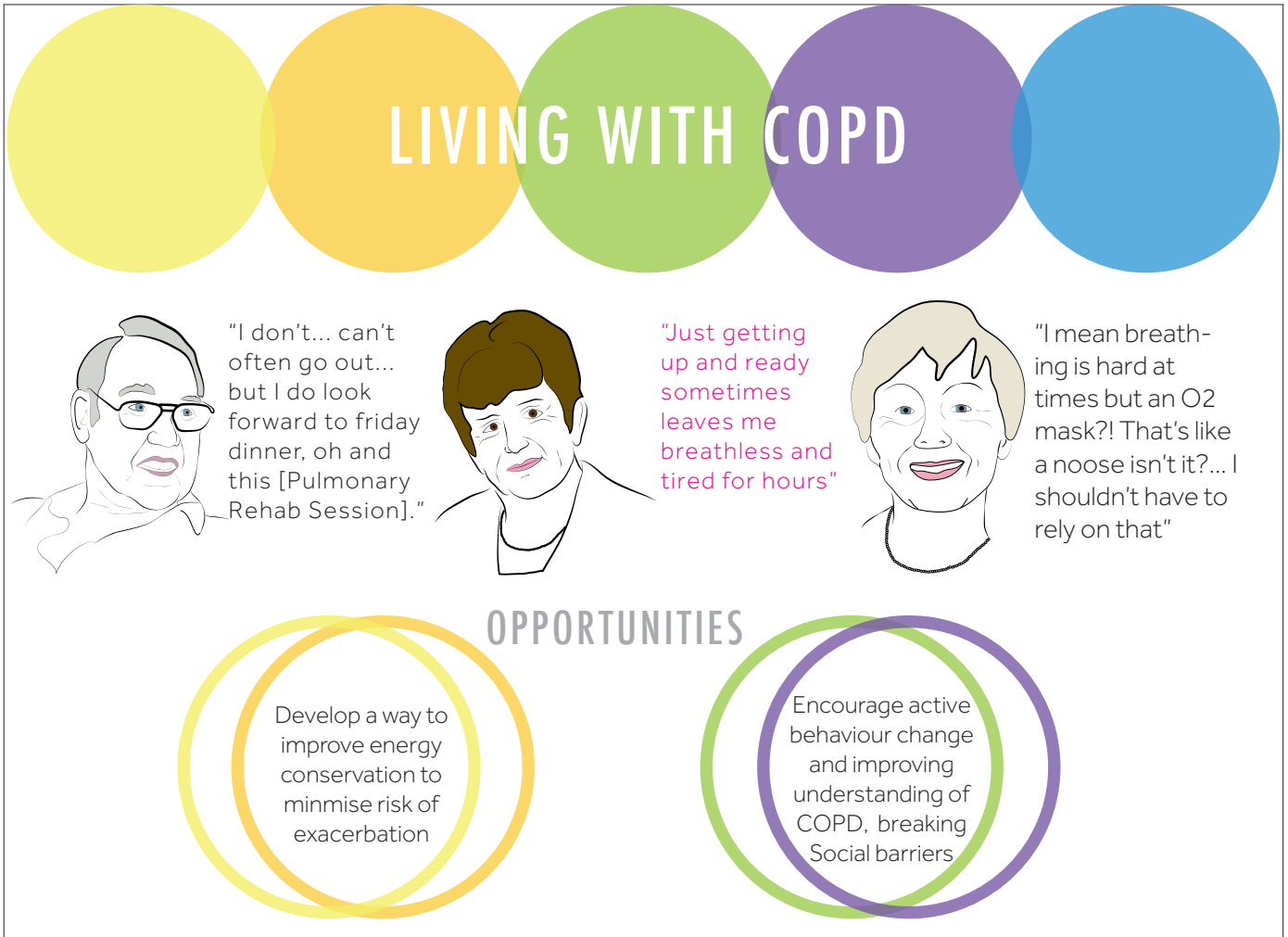
Placement:

Design Technician, UWE.

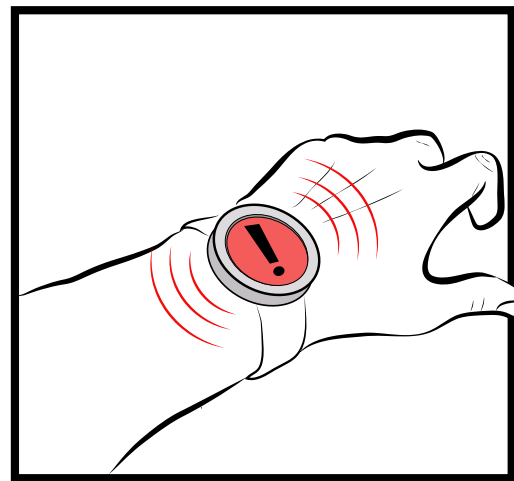
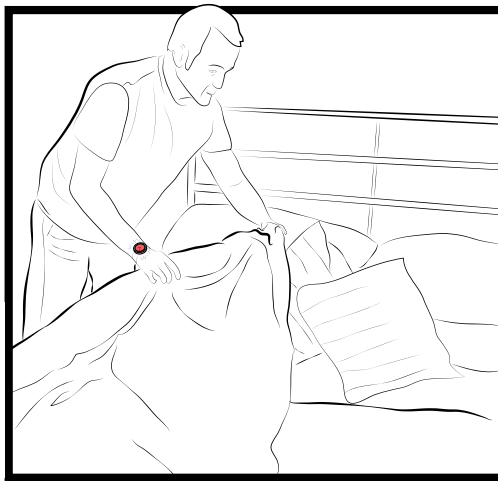
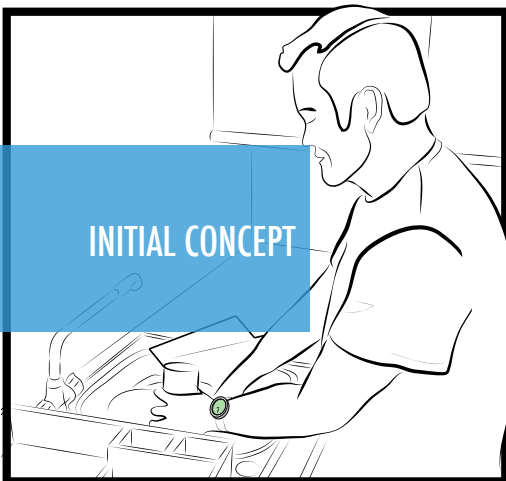
[cargocollective.com/
estynvaughanjones](http://cargocollective.com/estynvaughanjones)

Individual Project: BALANCE

The aim of BALANCE is to ease the lives of those suffering with COPD; to give them back some quality of life wherever possible. The wrist worn device includes a pulse oximeter; this monitors the users progress and records results onto an online profile. Here users can plan and organise their time, keep a journal of activities as well as review their progression.



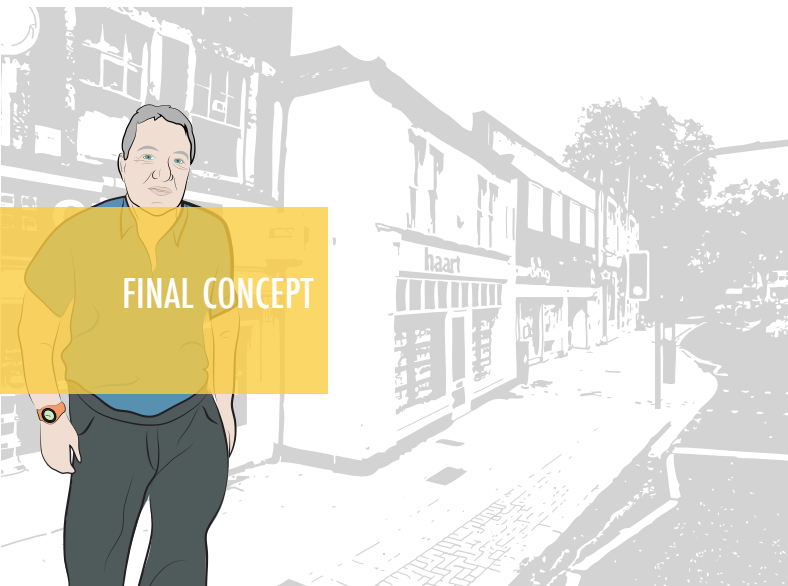
INITIAL CONCEPT



USER TESTING



FINAL CONCEPT



Emily King

Creative Product Design

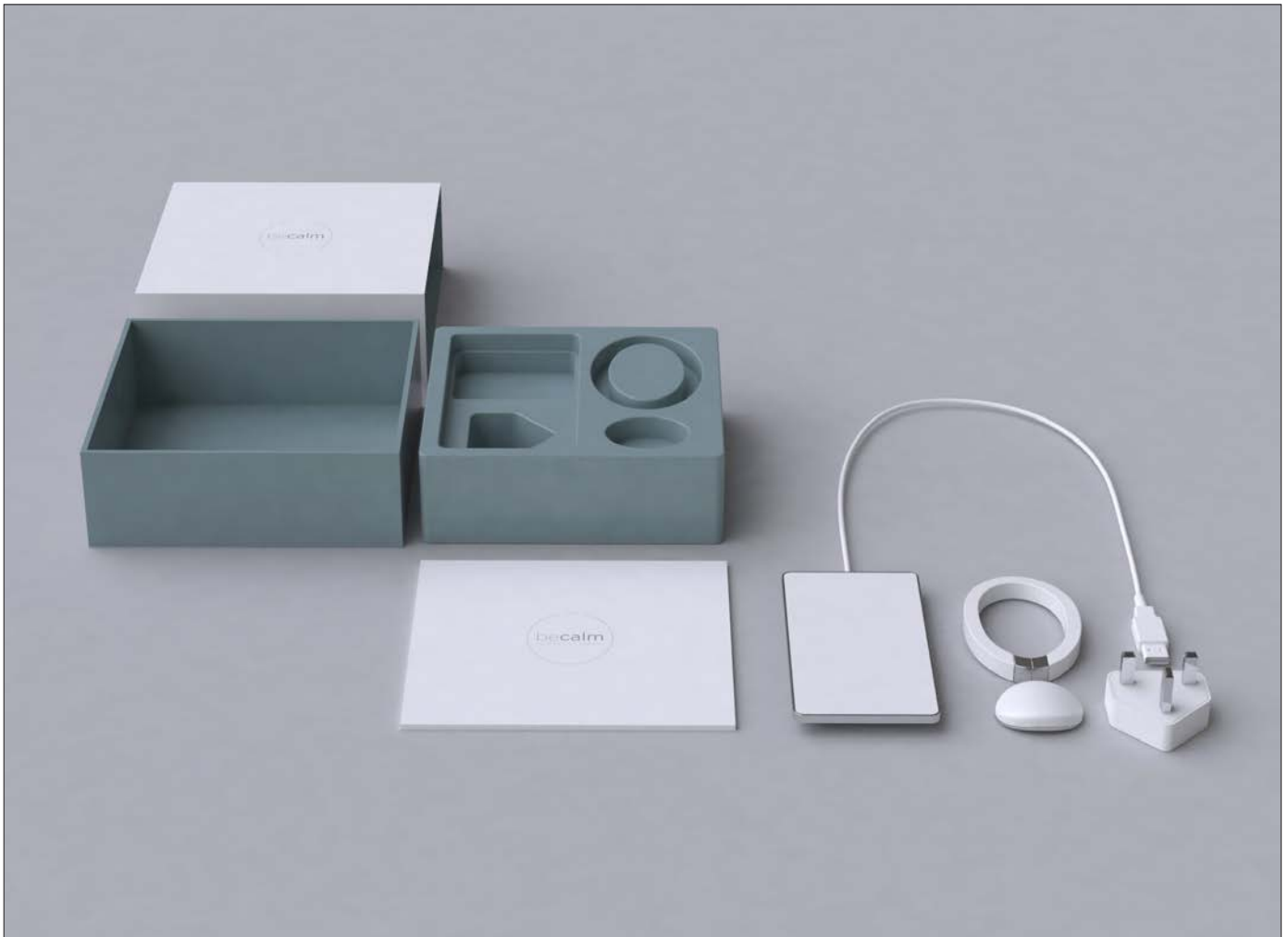
Placement:

Blink Studio

www.ralphedwards.co.uk

Individual Project: Becalm | Supporting Carers

In the UK, there are currently 670,000 familial carers suffering from emotional, physical, social and financial strain. Becalm supports the carer by aiding in remaining calm. The system consists of a wristband that notifies the user of their stress, a pendant that provides a focus point to reduce stress and a service that guides them. Improvement in the carers experience should in turn lead to improvement in the quality of the care they give.





Richard Merreywether

Creative Product Design

www.coroflot.com/richardmerreywether

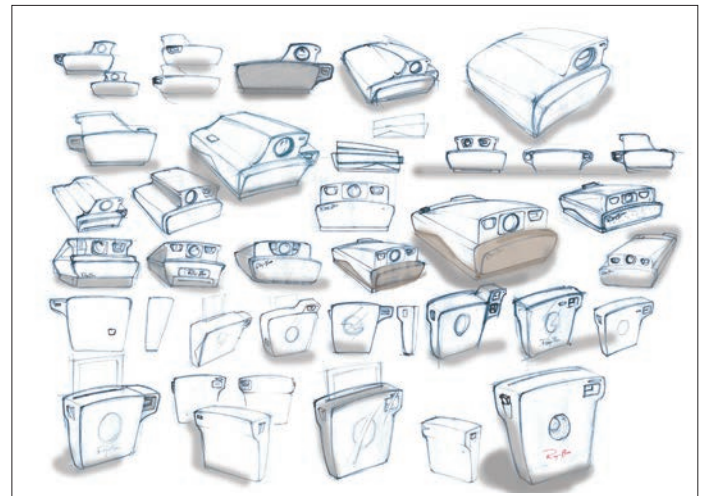


Individual Project: Impetus

Impetus is a product designed to help prevent deep vein thrombosis in pregnant women by increasing physical activity. If physical activity remains at a low level for an extended period of time it will actively stimulate the calf muscle using electric impulses to increase blood circulation reducing

Semantic Design Lab: Ray-Ban Instant Camera

Product line extension designed to match the style of the iconic Ray-Ban Wayfarer sunglasses.





impetus 
set your body in motion



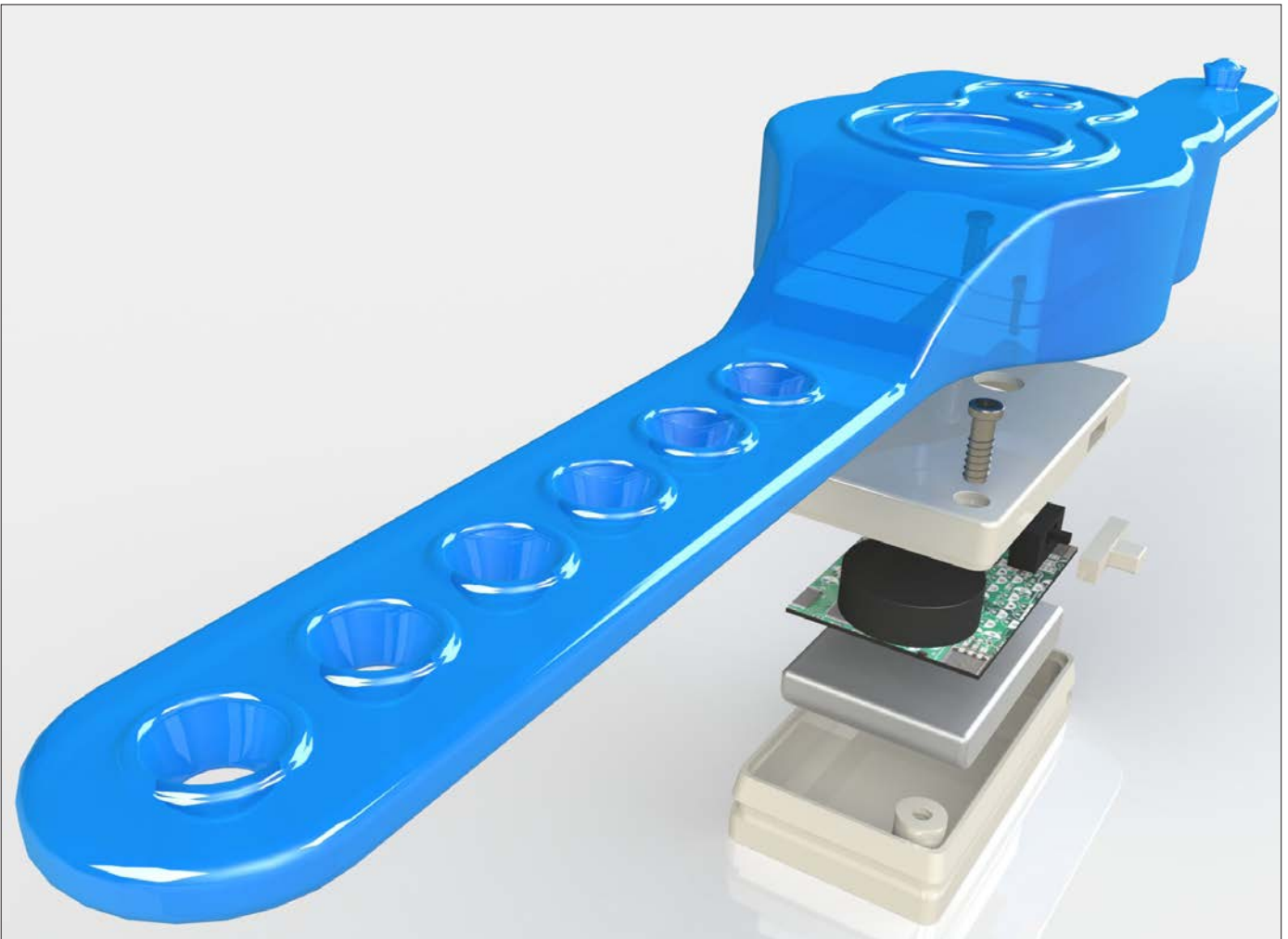
Grant Nichols

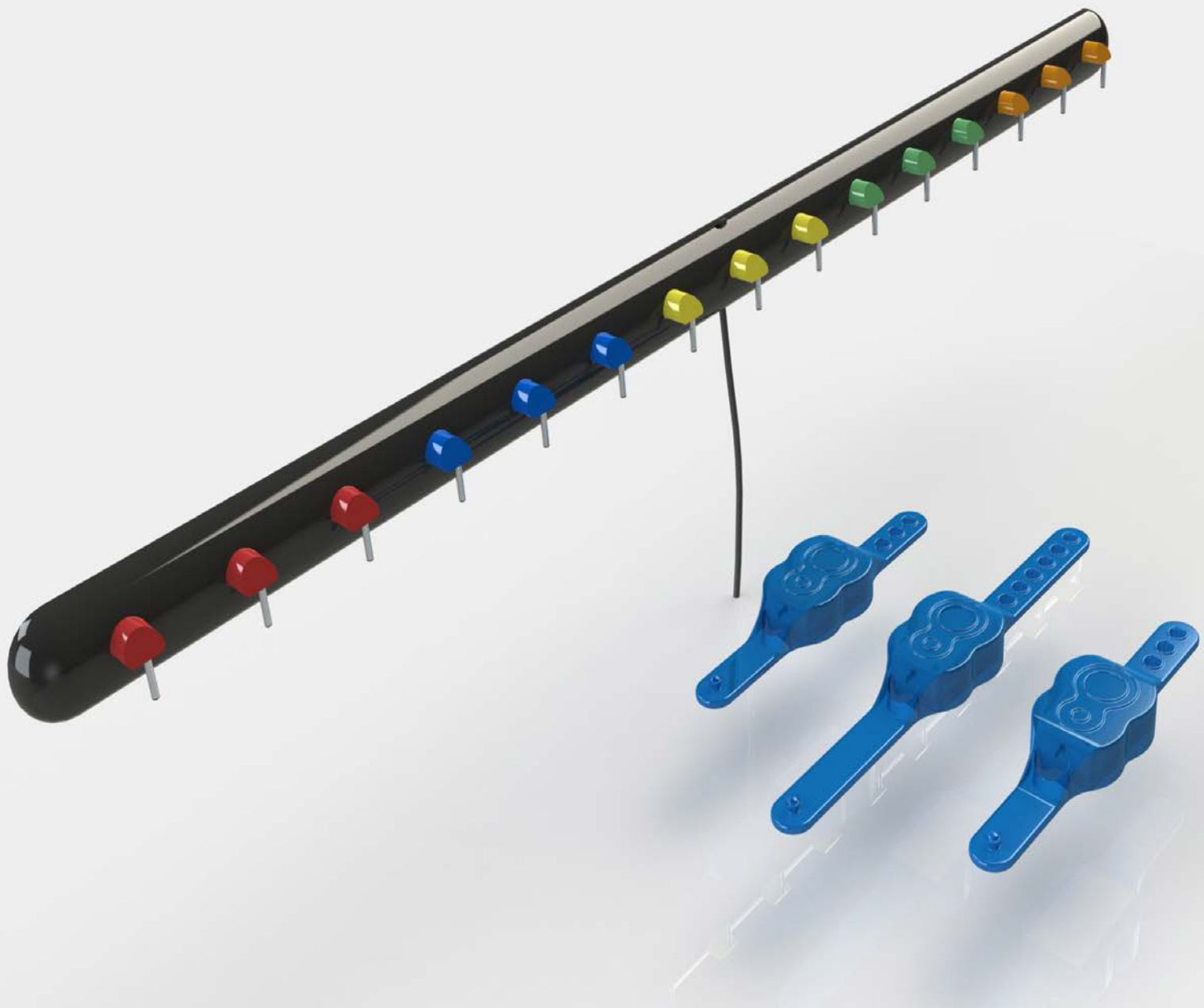
Creative Product Design



Individual Project: Buddy Bands

Buddy Bands are smart wristbands that assist parents and guardians with supervising children under the age of eight in privately owned or local authority swimming pools. The smart wristbands keep children under the age of eight at a safe distance from their parents or guardians as well as making the child more visible to lifeguards, achieving a safer swimming experience for everyone.





Buddy Bands

Achieving a Safer Swimming Experience

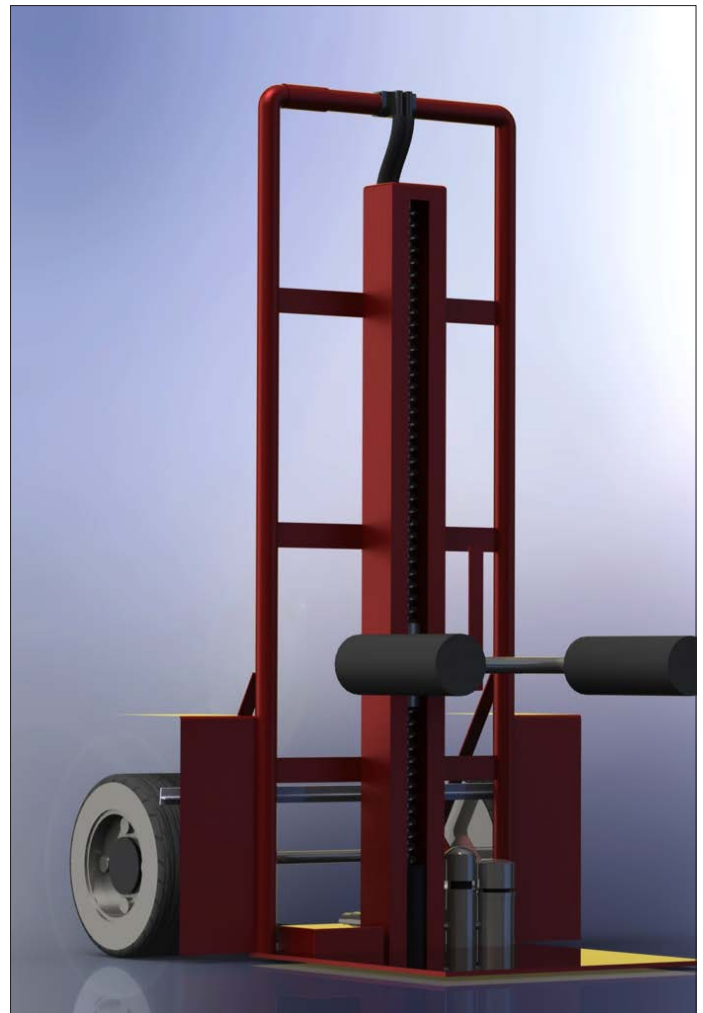
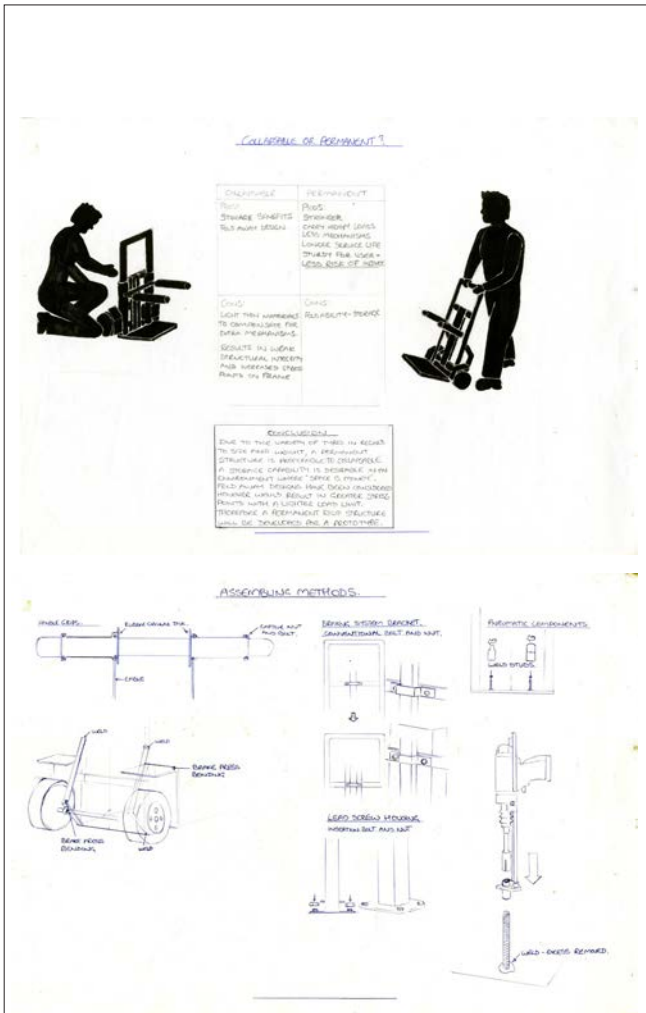
Chris Oram

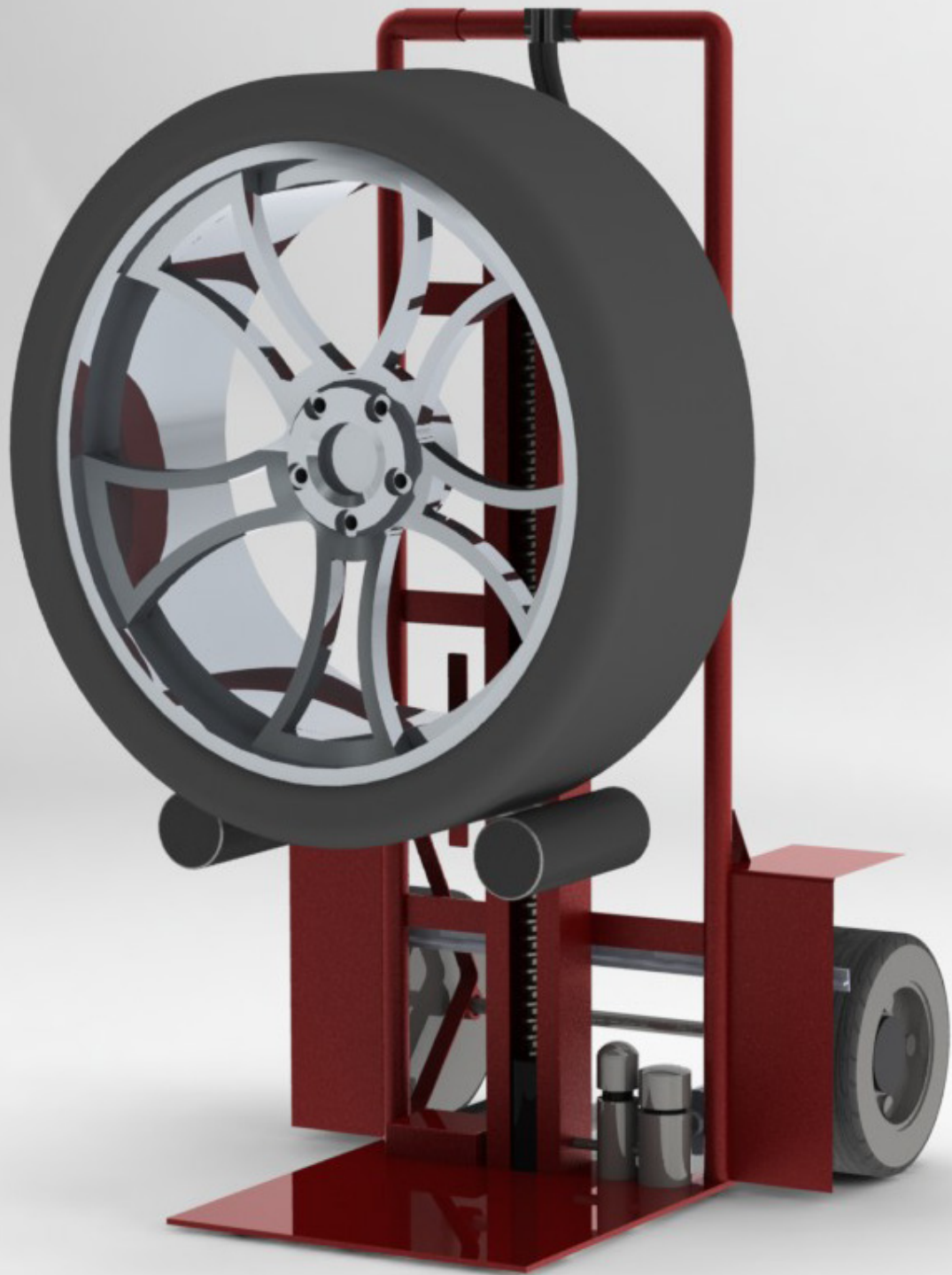
Creative Product Design



Individual Project: TyreAid

TyreAid is designed to aid and prevent back injuries in the automotive workspace. The rollers used for aligning the tyre are raised and lowered by a lead screw which is powered by the air-lines used in the workshops. The air-line is connected to a rotary actuator at the base of the lead screw which rotates clockwise or anti-clockwise, raising and lowering the rollers to the desired position.





James Parkinson

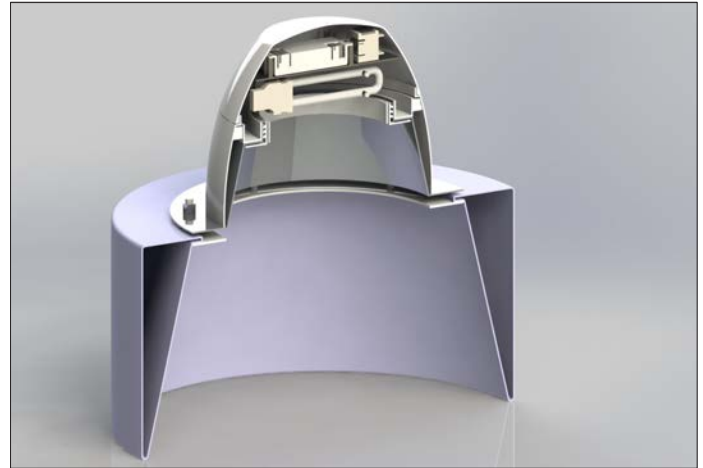
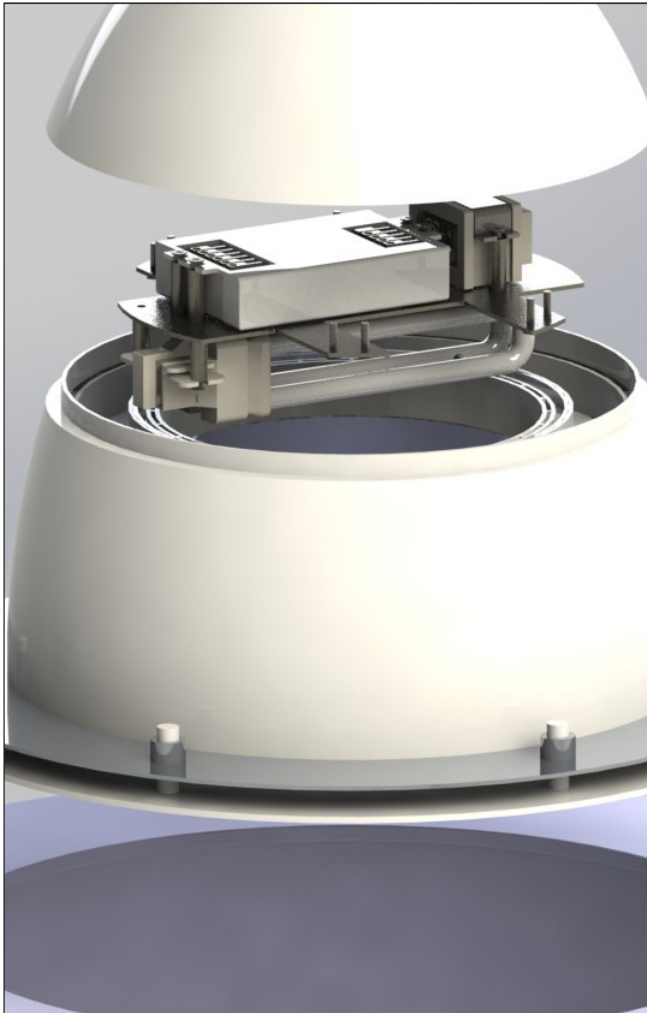
Creative Product Design



www.darkhorsecpd.com

Individual Project: Soular

Each acute hospital trust in the UK spends on average £92,000 a year treating inpatient falls. Soular is a revolutionary lighting concept aimed at reducing fall rates. Primarily the increased lighting quality offered serves to aid independent mobility. Secondly the patients circadian rhythm is stimulated by Soular's ability to mimic external sunlight levels in real time.







Adam Rosling

Creative Product Design

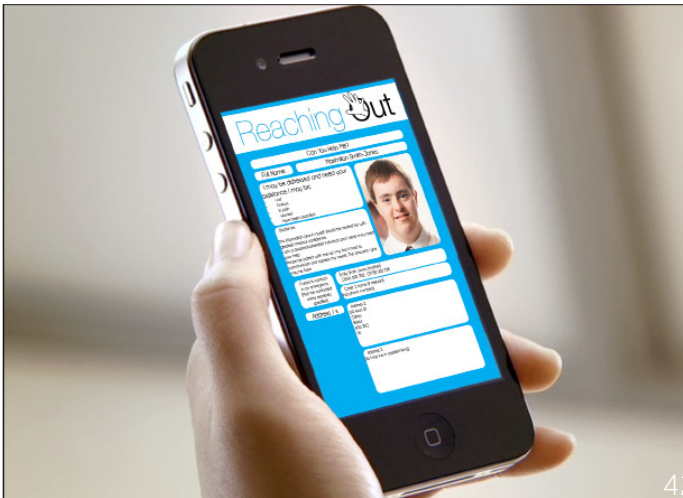
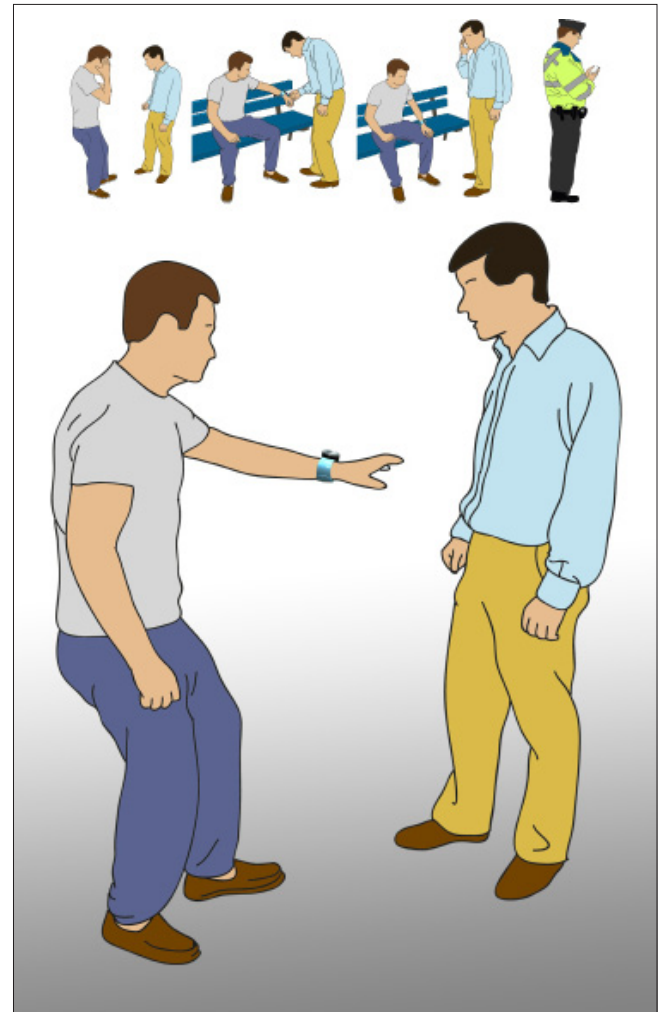
Placement:

Minale Tattersfield

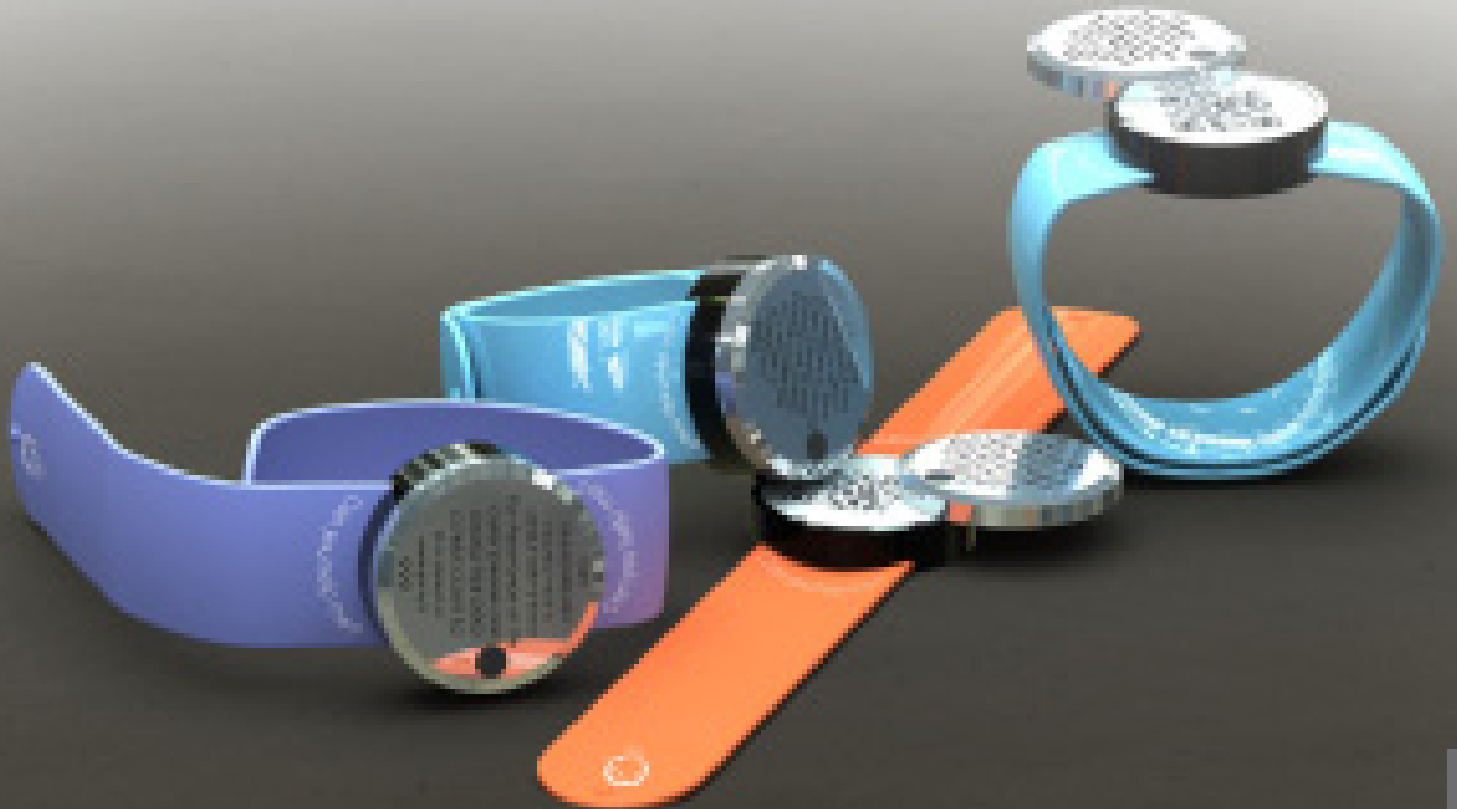
Website: www.adamrosling.wix.com/adam-rosling-design

Individual Project: Reaching Out

ReachingOut wristband talisman enables learning disabled adults to gain increased independence in the community. It promotes communication, provides reassurance and is a tool for accessing support. The personal independence passport accessed via a QR code (emergency services only); and general information for the general public, for assisting the individual.



Reaching Out



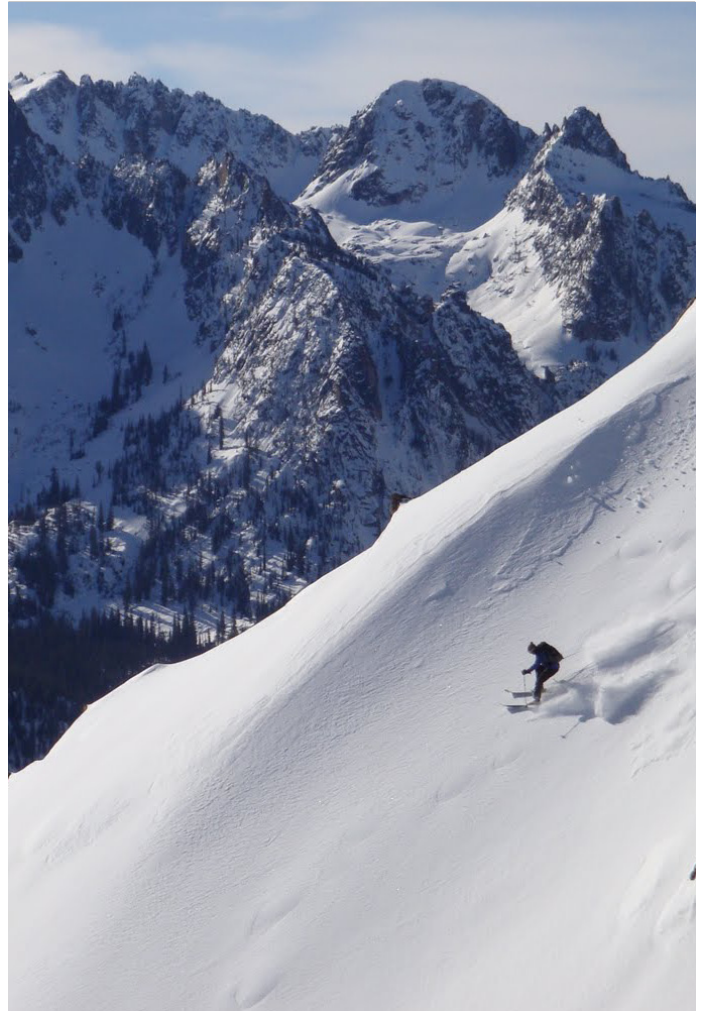
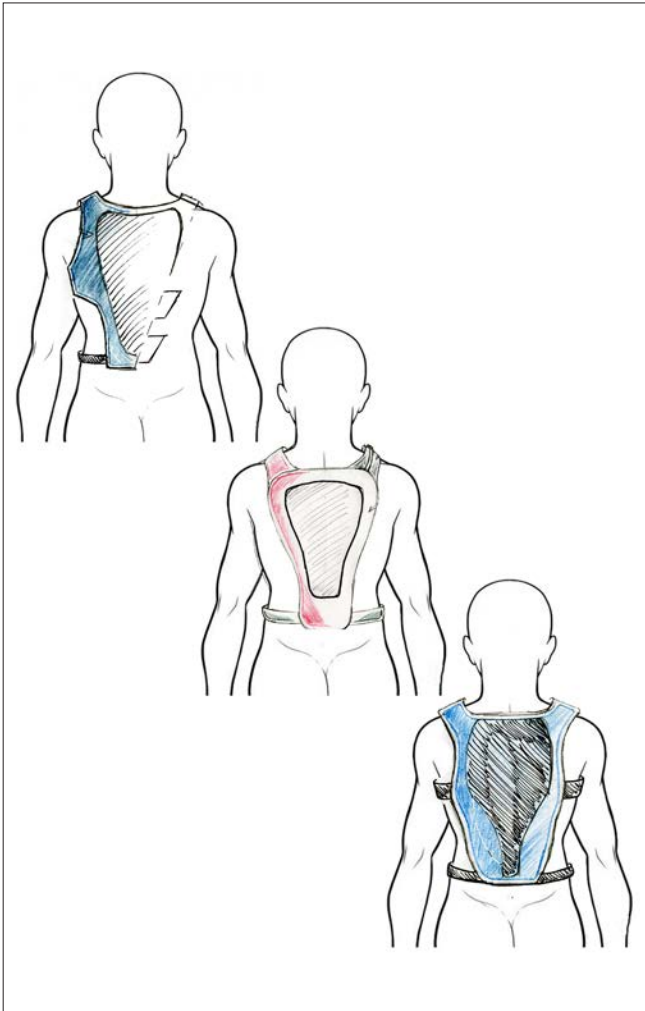
Thomas Sullivan

Creative Product Design



Individual Project: AvaShell

The Avashell gives off piste skier's peace of mind and assures them of their safety in avalanche situations. The backpack which when activated heats the snow around the victim allowing room to breath and much needed mobility. As well as a stand-alone product it works in conjunction with pre-existing backpacks to increase the survival rates of avalanche victims.





Connor Temple

Creative Product Design



www.coroflot.com/ConnorTemple

Individual Project: Lifemast

Lifemast is a road safety product. It is designed to help reduce the amount of roadside accidents. From research it was found that most roadside accidents occur on the hard shoulder when people are pulled over, between 6pm and 4am of winter months. This is when the visibility is low. Lifemast is designed to improve the drivers visibility at these times.





LIFEMIST



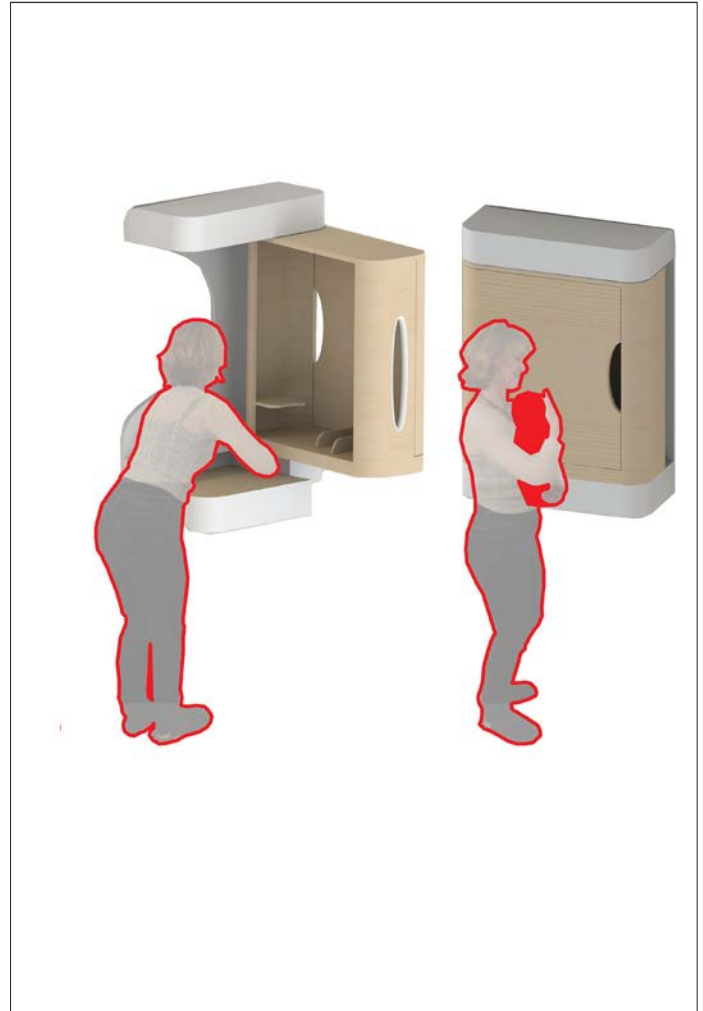
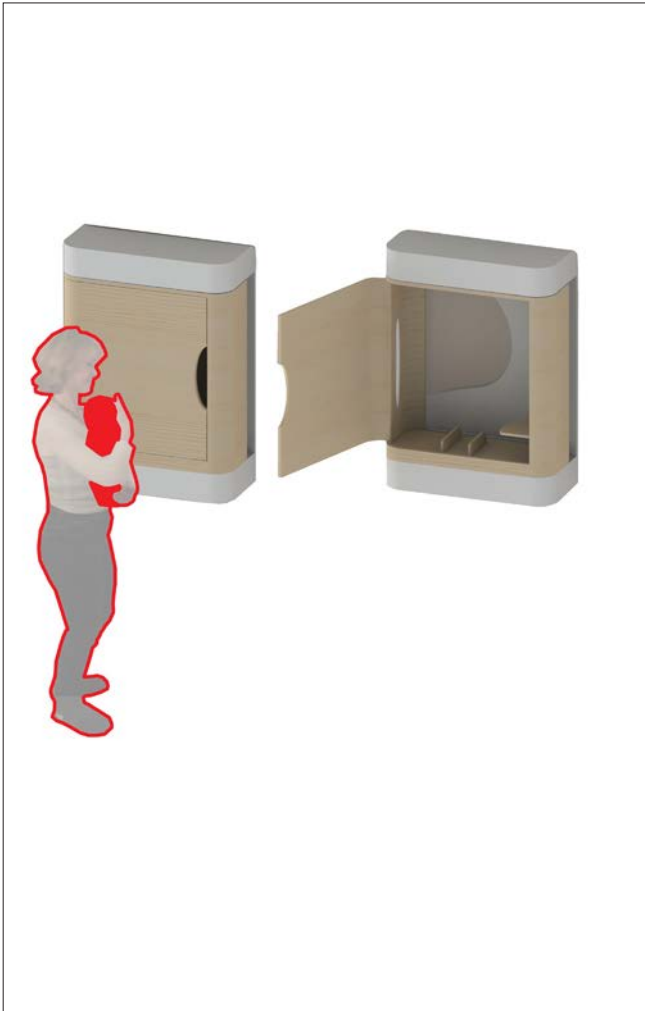
Luke Ward

Creative Product Design



Individual Project: The Changer

The changer is a changing table and wardrobe that makes the changing experience an enjoyable one, allowing you to bond with your child. Early physical and emotional contact between parent and child is of crucial importance. That's why the Space-to-care is designed so that you can face your child, whilst space for your feet allows you to get closer to your baby.





Dan Wilson

Creative Product Design

Placement:

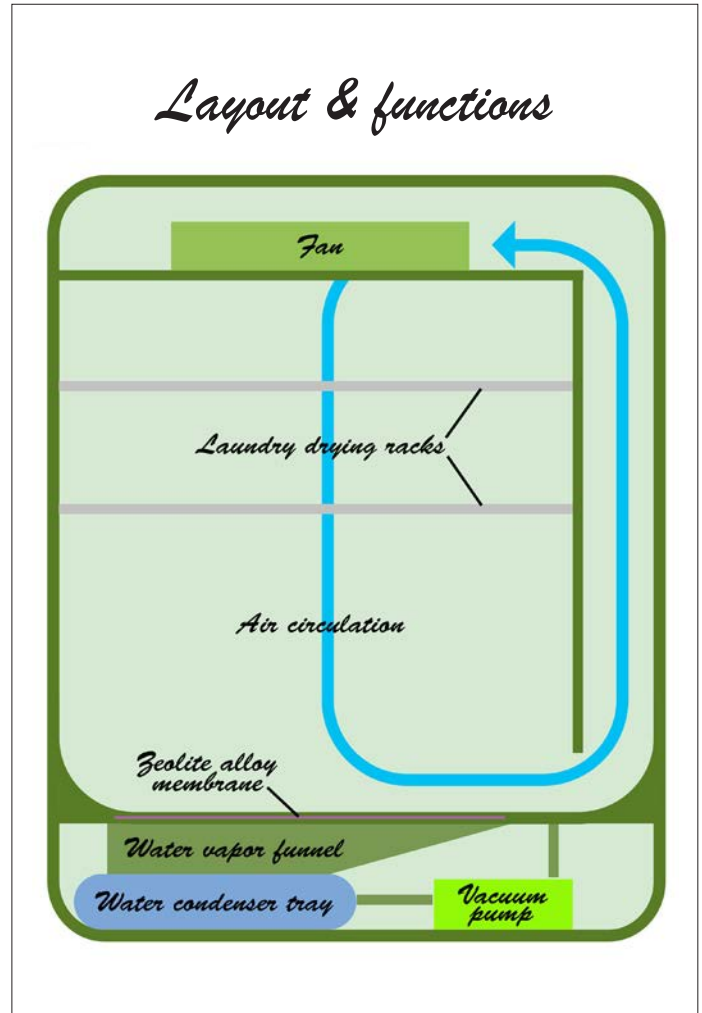
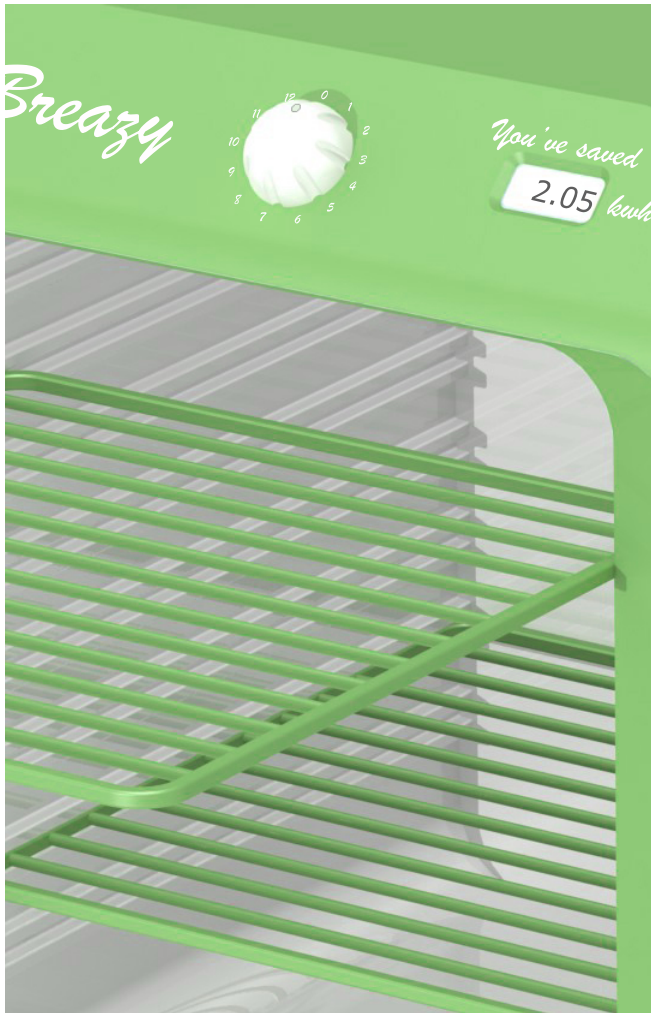
Walter Jack Studio

daniel.j.wilson@hotmail.com



Individual Project: Breazy Laundry Dryer

This project touches upon three main problems of the 21st century: the energy crisis, climate crisis, and personal finance crisis. Breazy is designed to rival the energy hungry tumble dryer through a new innovative drying process which requires quarter the energy. Zeolite alloy membranes are used to dehumidify a closed air stream, preventing moisture release into the household.





Breazy

You've saved
0.21 kWh



Product Design Technology

The PDT course incorporates a wide array of design skills and knowledge necessary for product development in today's fast paced society. These areas of study include design research, design communication, design development, engineering analysis and design for manufacturing.



BRAMBLE



Alex Botwright

Product Design
Technology

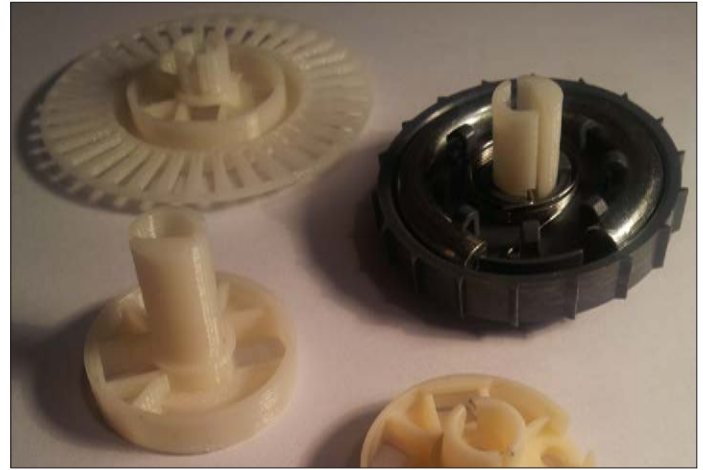


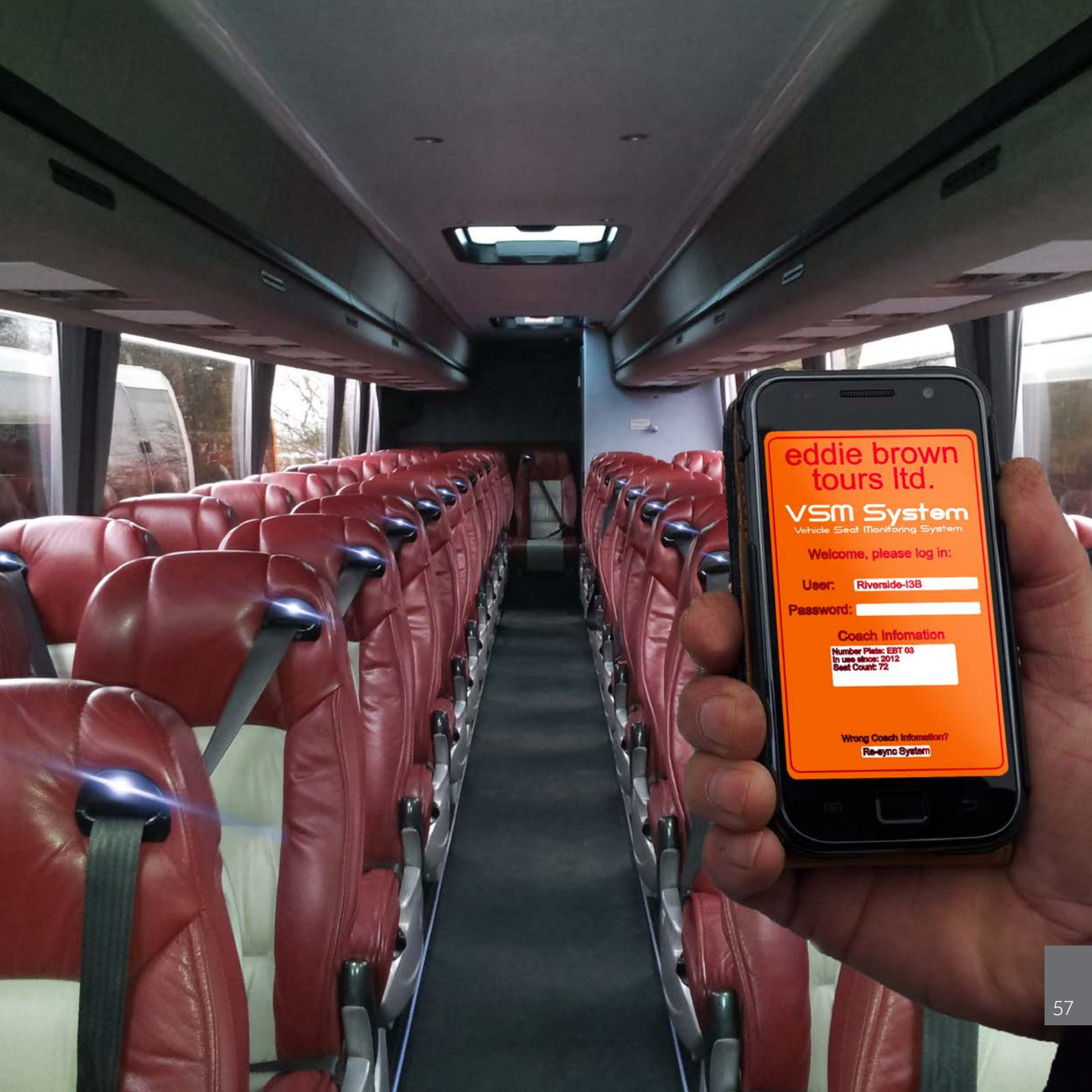
www.botwright.co.uk

Individual Project: Vehicle Seat Monitoring System

Ensures passengers stay safe; in spite of themselves. It monitors whether passengers are seated and clipped in properly. This information can be accessed from an Android or iOS App at the front of the coach or by quick visual inspection.

It offers peace of mind for coach operators and group leaders alike.





eddie brown
tours ltd.

VSM System
Vehicle Seat Monitoring System

Welcome, please log in:

User:

Password:

Coach Information

Number Plates: EBT 03
In use since: 2012
Seat Count: 72

Wrong Coach Information?
[Re-sync System](#)

Ben Bright

Product Design
Technology

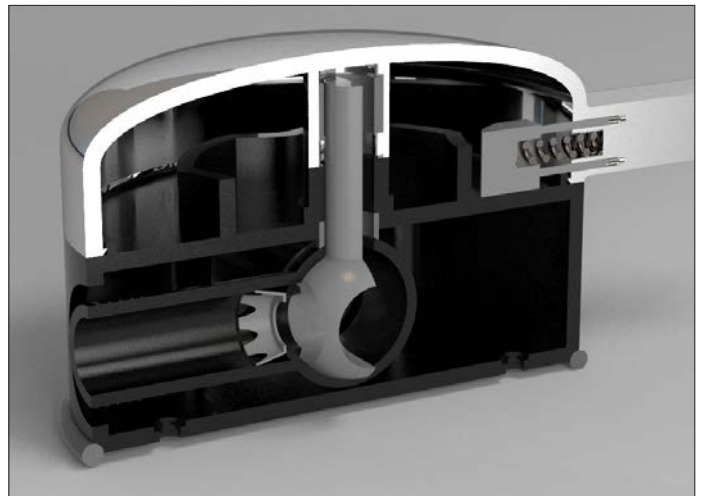
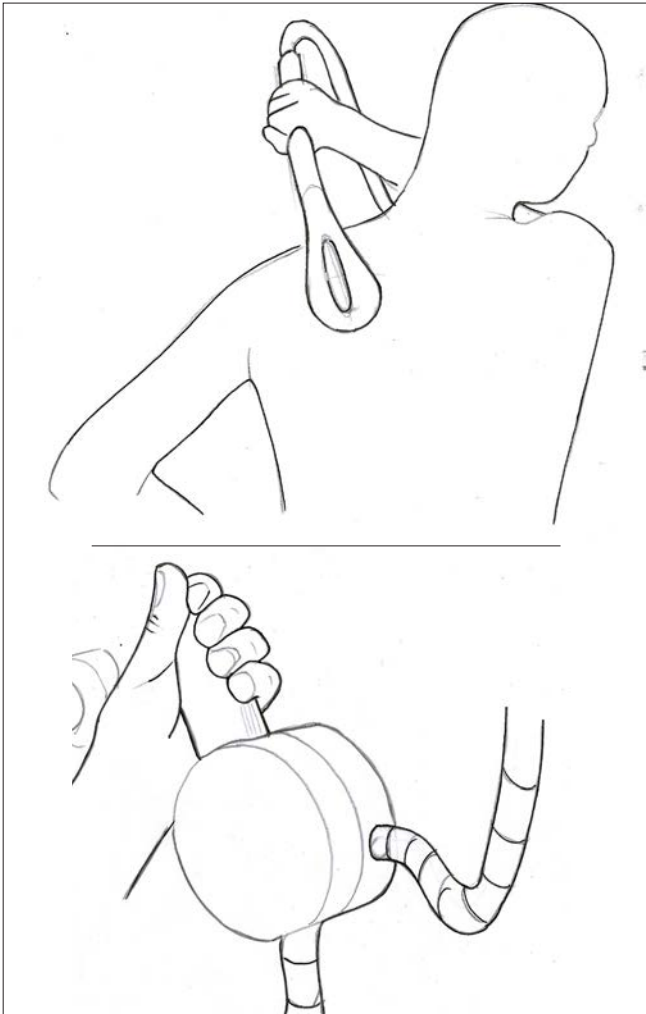
Placement:

Smallfry
D2M Innovation

www.coroflot.com/benbright

Individual Project: Niaqua

'Niaqua' is an aftermarket shower system that aids the elderly in the daily task of showering. A diversion valve allows each head to be isolate independently of each other with one turn of a handle. This allows the user to use the second assistive head as a lathering and washing device.





NIAQUA

Will Burrows

Product Design
Technology



Individual Project: Rota-Hive

Rota-Hive has been designed for the migratory beekeeper to improve commercial productivity. The hive can be rotated to provide direct access to both the bee-containing brood box and honey-containing super box without the need to split the hive apart. The wheeled design makes it easy for a single operator to relocate the hive from site to site.





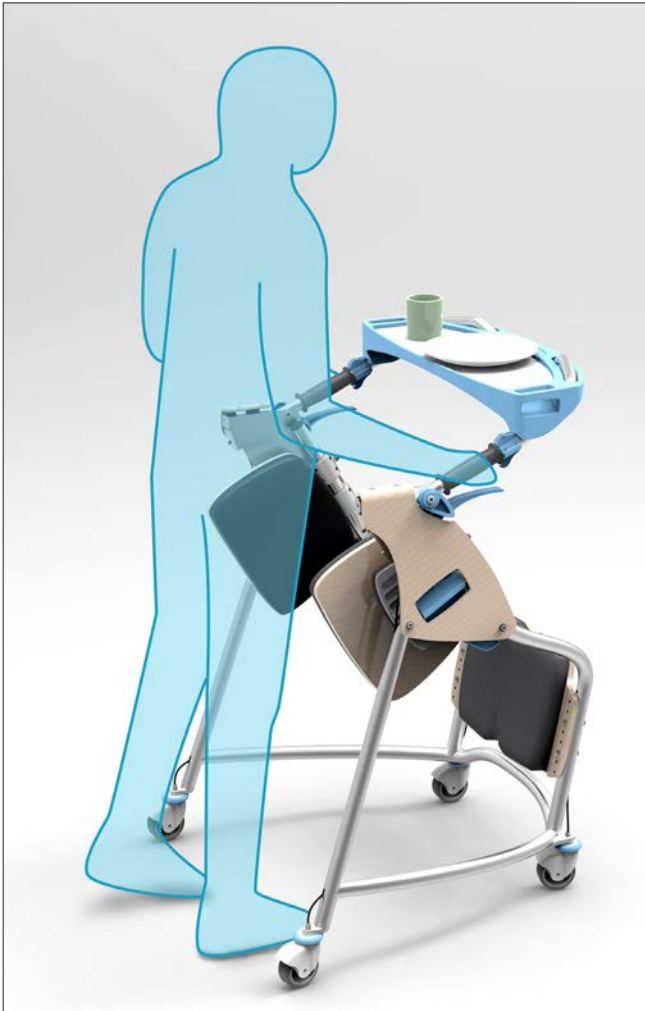
Alex Campbell Hill

Product Design
Technology



Individual Project: Steti Stand

The Steti Stand is an assistive product for helping people with impaired mobility to stay independent in their own kitchen and home. It provides walking aid (with carry tray) as well as a mobile perching seat with a shin rest, which allows users to carry out worktop tasks, such as preparing food, in a comfortable and rested posture. The design focus for the Steti Stand was ease of use.



Steti
Stand



Ashley Chappell

Product Design
Technology

Placement:

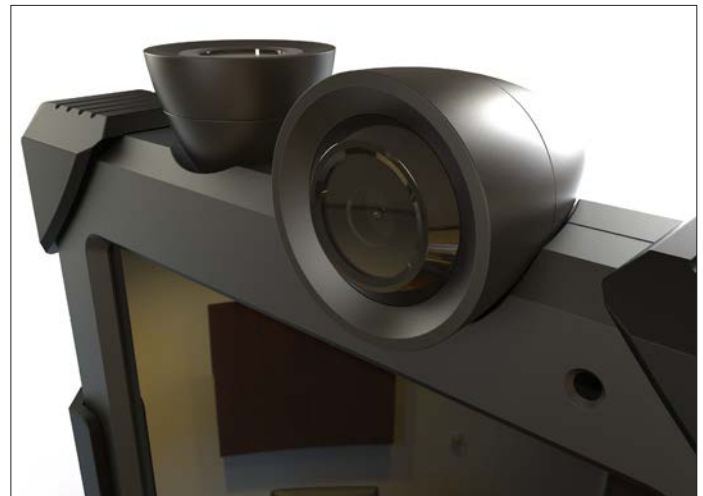
Horstman Defence
Systems

www.coroflot.com/ashc91



Individual Project: Vigilance

Vigilance is designed to help reduce hostility between police officers and crowds. The screened camera makes crowd individuals more conscious of their actions by increasing their awareness of being identified. At the same time the officer is also recorded on the upward facing camera, while the wrist worn officer biotelemetry device monitors and warns an officer of their hostility towards the crowd.





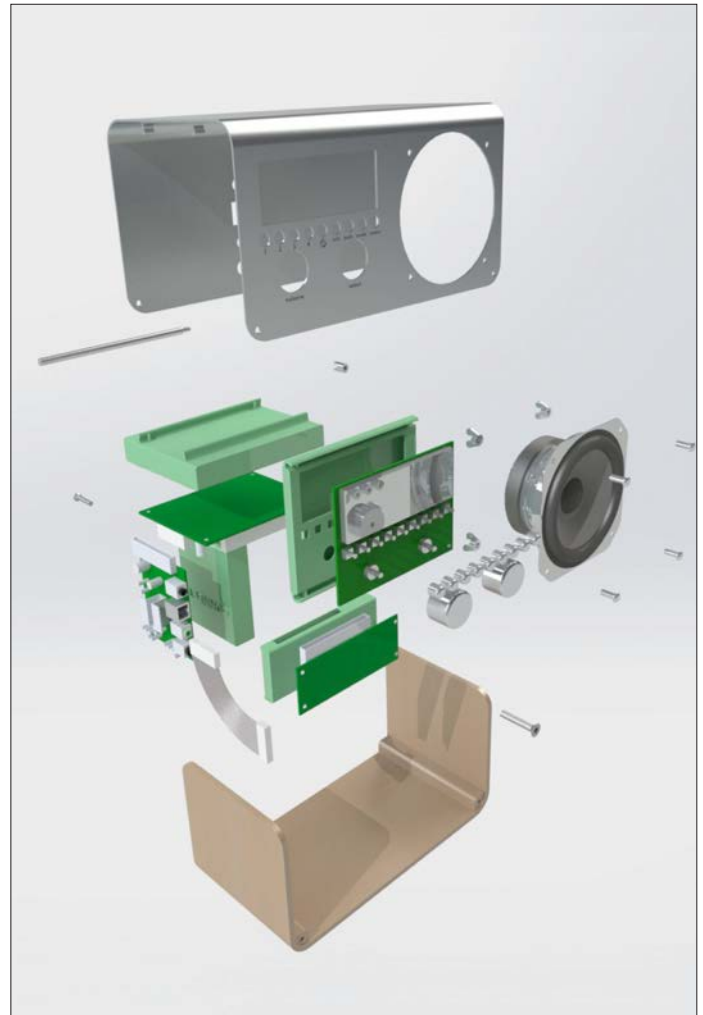
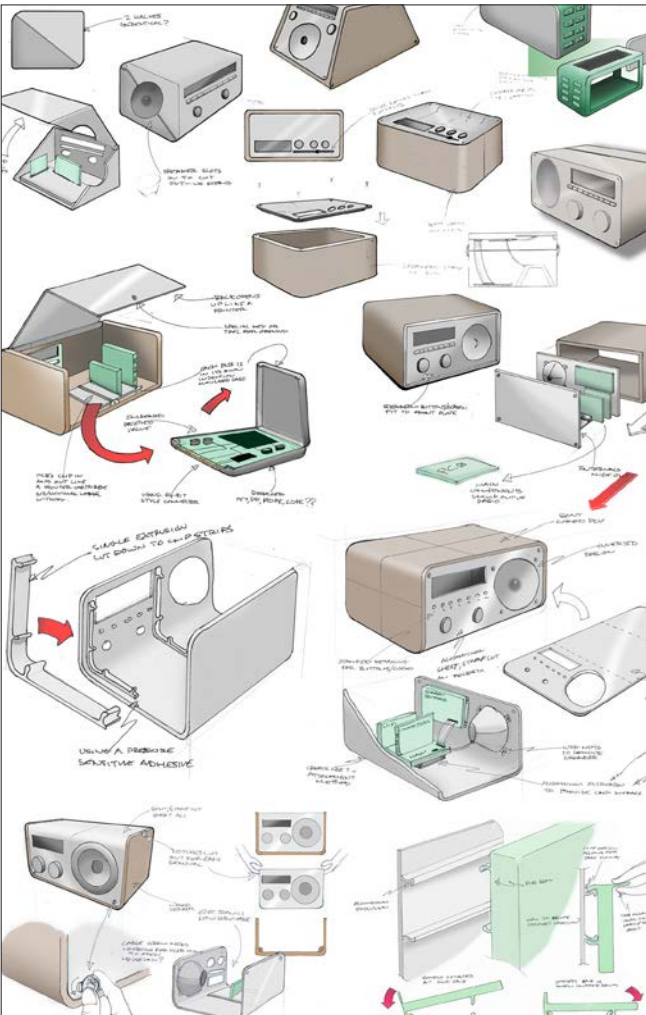
Charlie Collins

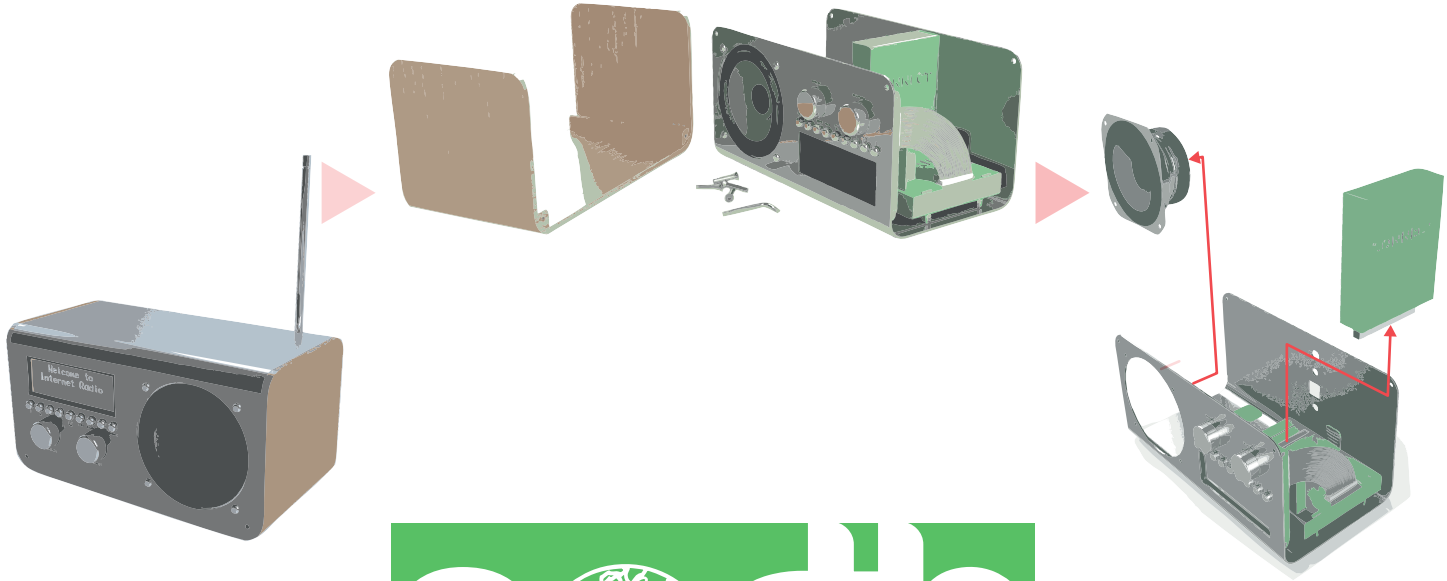
Product Design
Technology



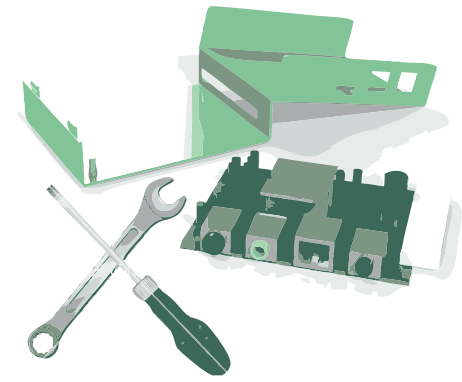
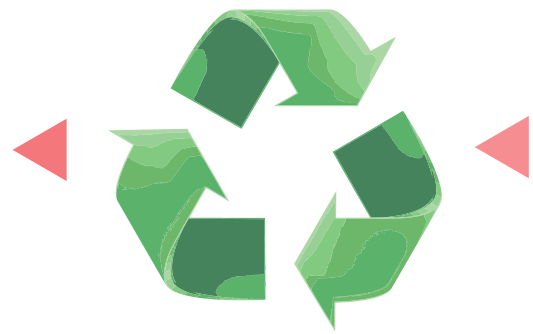
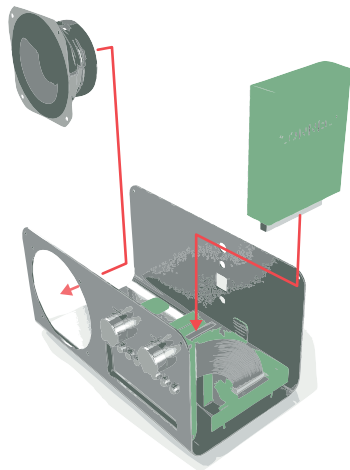
Individual Project: Earth Radio

The Earth Radio has been designed to tackle the major issue of electronic waste. It has been designed to have an extended life span and use minimal resources through a closed loop system. The radio has been designed with ease of repair, and end of life in mind. This creates a product that the user will cherish but will prevent unnecessary waste during, and at end of life.





earth



Robyn Coutts

Product Design
Technology

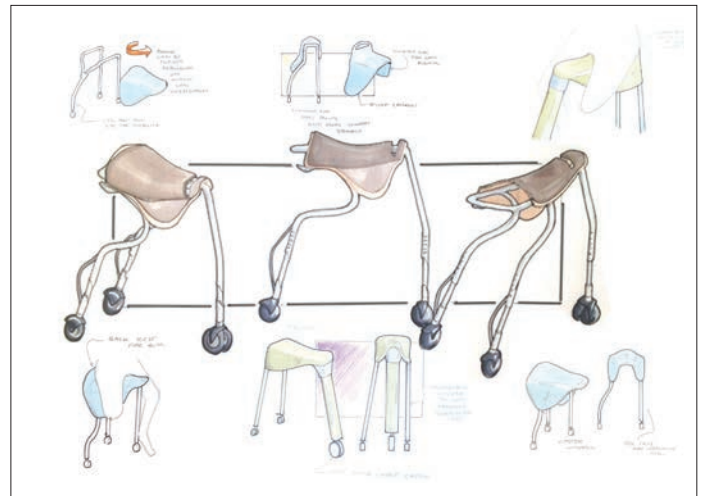
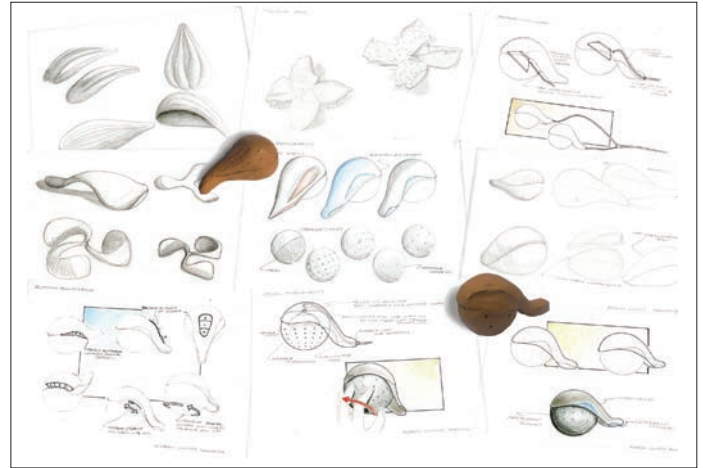
Robyn_coutts@hotmail.co.uk



Individual Project: Stable

Stable is a new way of approaching mobility for Amputees. Designed specifically for use in the home it offers a weightless form of transport allowing the full use of arms. It aims to reduce the risk of falling and provide a break from using a prosthetic full time.

Also shown is the development of a speaker inspired by natural form.





"Rethinking mobility for Amputees"



Richard Fox

Product Design
Technology

Placement:
ARNO GB

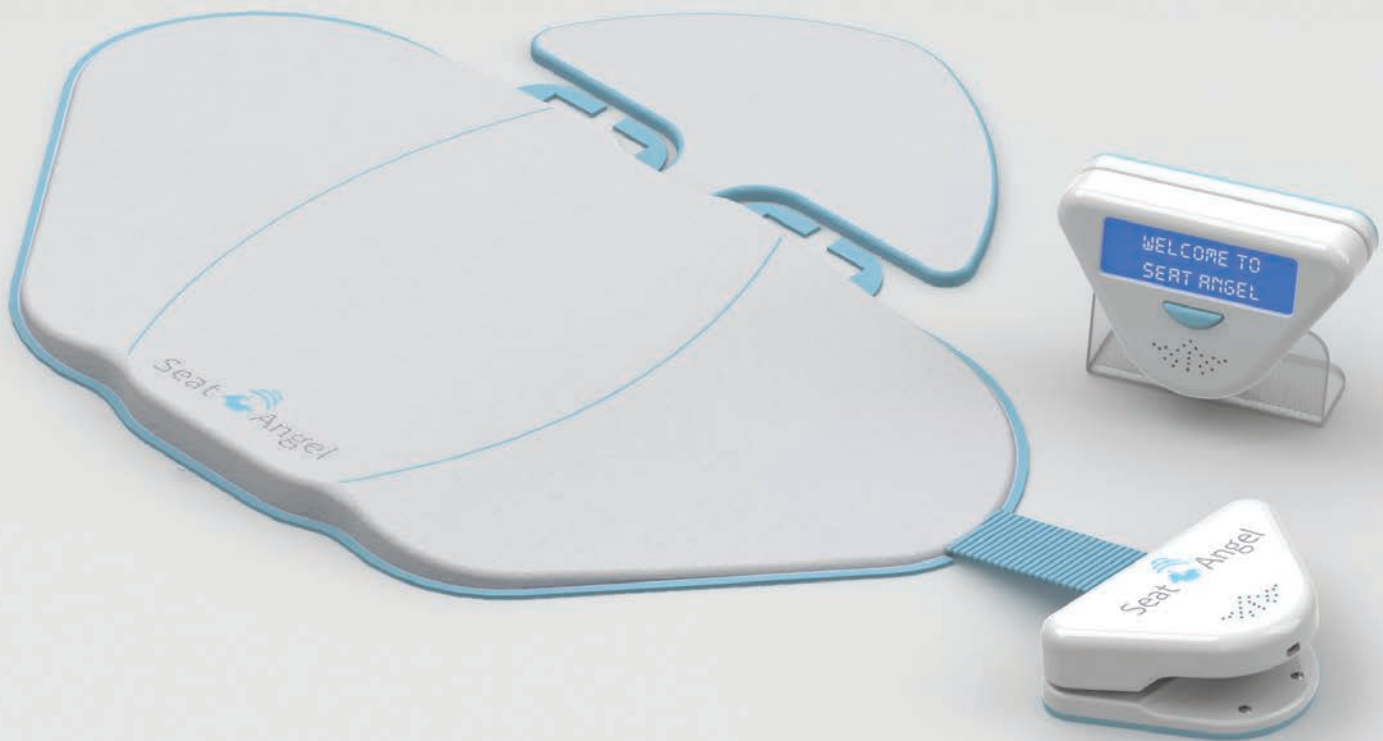
www.richardjfox.co.uk



Individual Project: Seat Angel

Seat Angel is an infant car seat sensory system. It monitors temperature, detects the presence of an infant to monitor travel time, and encourages a good postural position to allow for clear breathing. Temperature and time readings are sent wirelessly to the display device which can be set up on the car dash board or removed to be clipped in other locations.





Seat  Angel

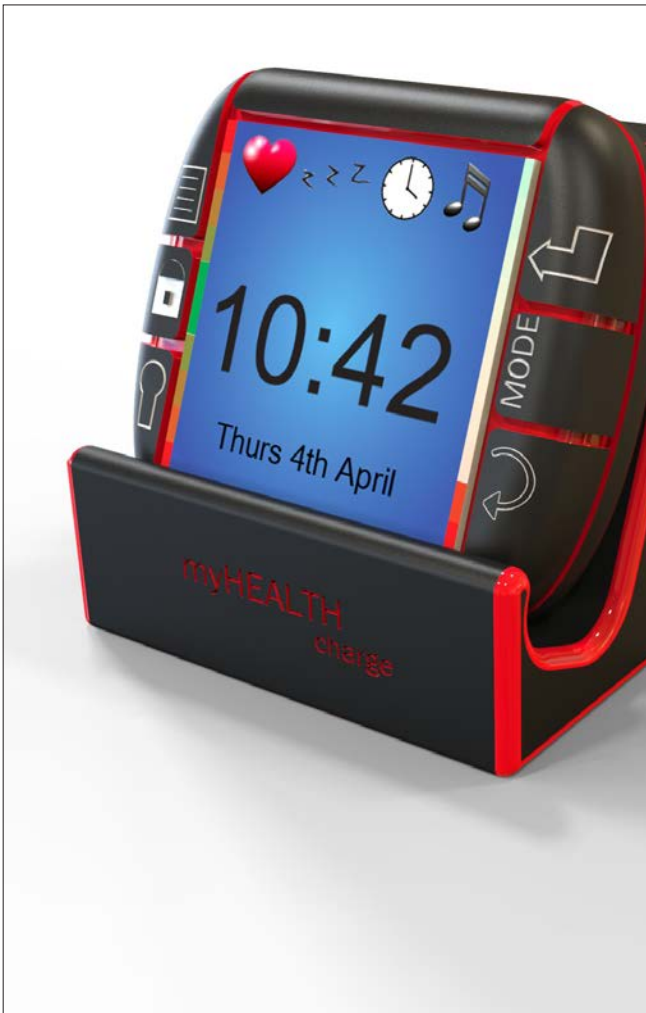
Uilliam Kilcourse

Product Design
Technology



Individual Project: MyHEALTH

MyHEALTH is a chance to provide the user with the ability to take control of their health and physical well-being. It is part of the MyLIFE range, the range helps with different aspects of our physical selves, which in turn improves users emotional and mental state.



MyHEALTH

Part of the MyLIFE range



James Kukla

Product Design
Technology



www.ralphedwards.co.uk

Individual Project: Watersmart

Watersmart is an intelligent system that encourages households to save water by giving them real-time, personalised information about their usage.

By highlighting the water and associated energy costs of activities in the home, Watersmart helps users pinpoint where simple behaviour changes could save them money and reduce their environmental impact.





Water Now 16 litres/minute	Cost now £ 2.20 hour
Energy £ 1.73 hour	
CO₂ 7.04kg hour	
Target	
20:32	21°C

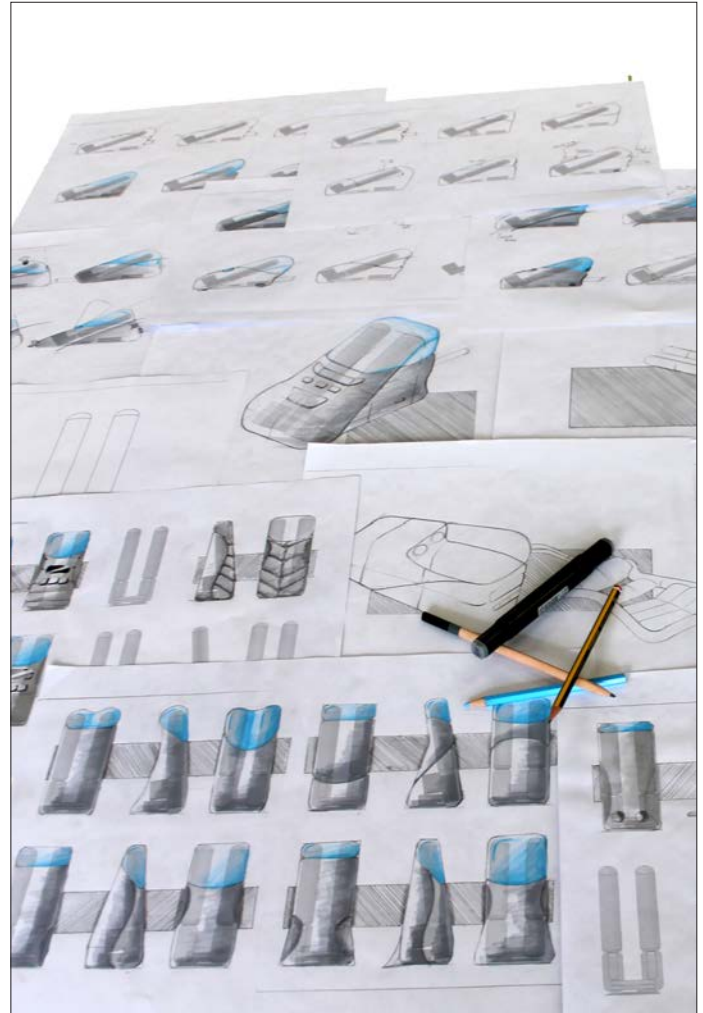
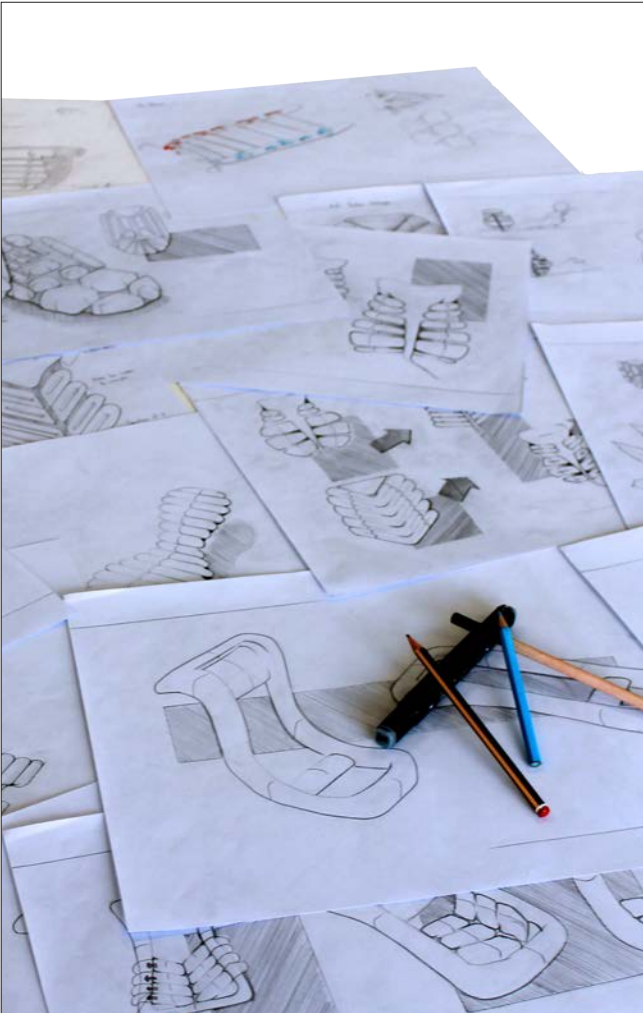
Oliver Lewis

Product Design
Technology



Individual Project: Impulse

Impulse allows people with epilepsy to bathe without the fear of drowning. It grasps the idea of floatation and cushioning air, to create an environment the user will feel safe to have a bath in, without the need of close supervision.



Impulse

Creating a safer bathing environment



Sam Millington

Product Design
Technology

Placement:
Arbitel Recycling

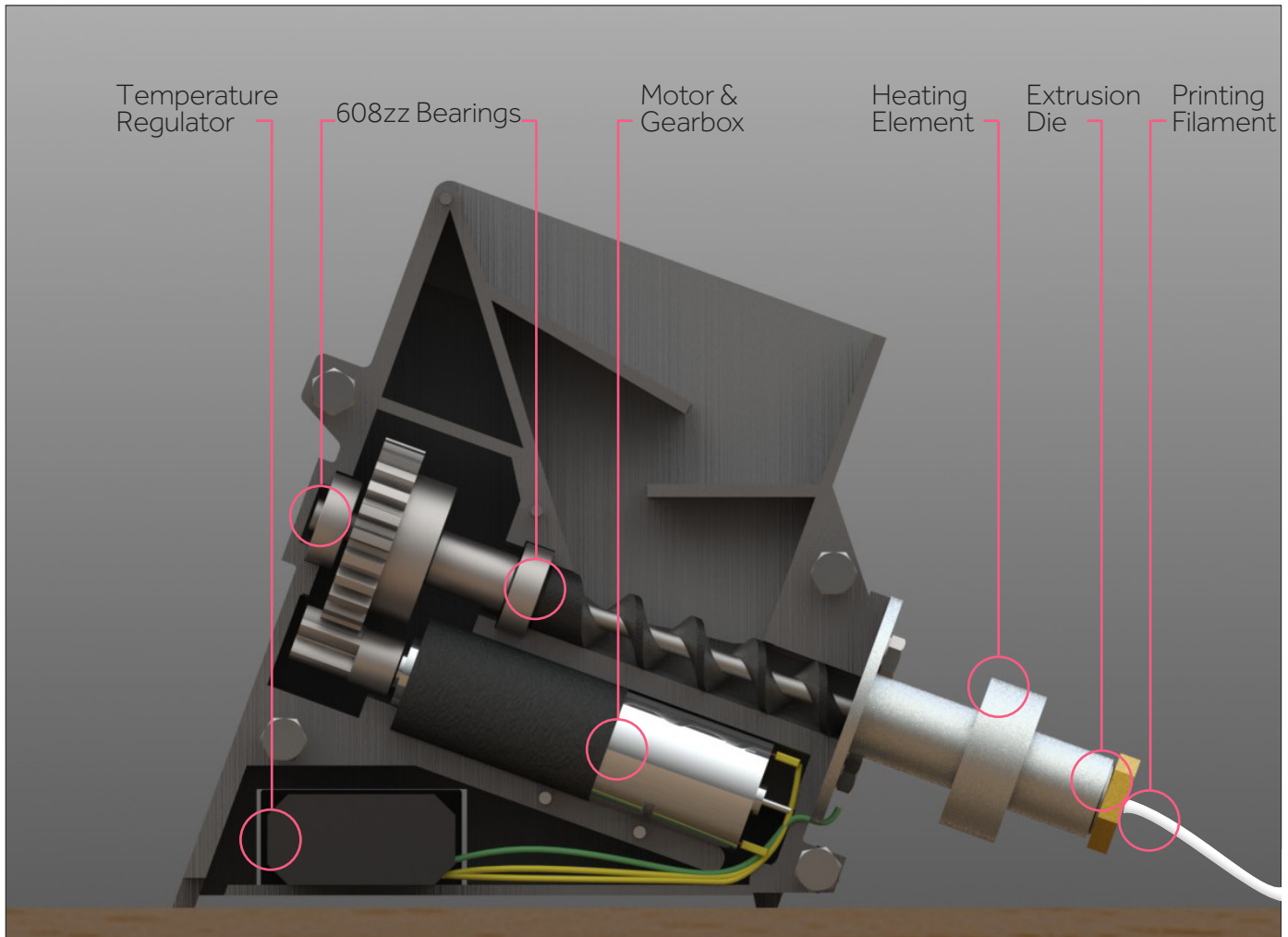
www.peakbeak.co.uk

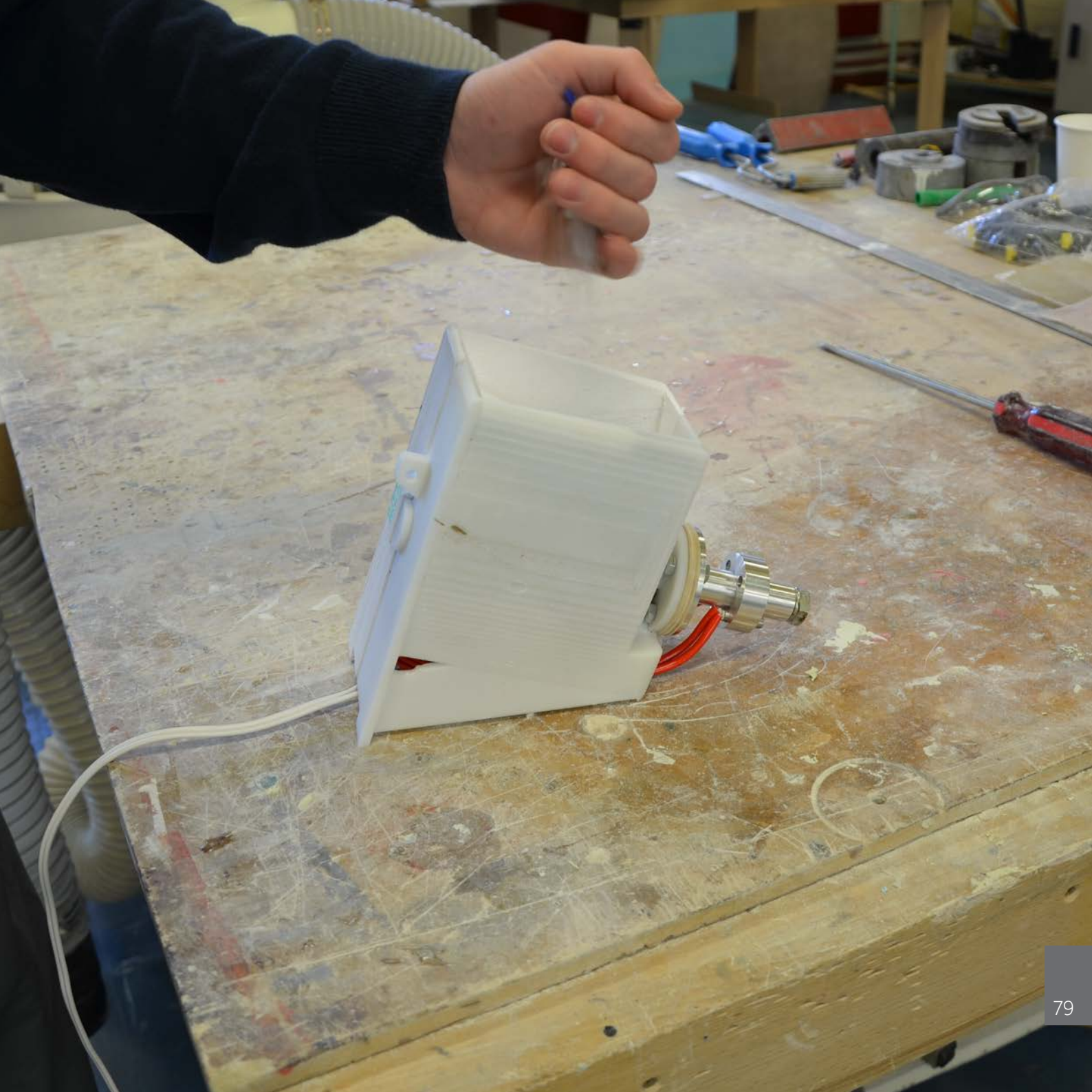


Individual Project: PrintMill

PrintMill is an educational aid aimed at teaching secondary school pupils about the importance of and the techniques used in the plastic recycling process.

The product converts shredded H.D.P.E. milk bottles into a plastic filament that can be used in most F.D.M. 3D printers, whilst instilling a sense of pride in the pupils.





Danielle Owden

Product Design
Technology

Placement:

Greenwood Airvac

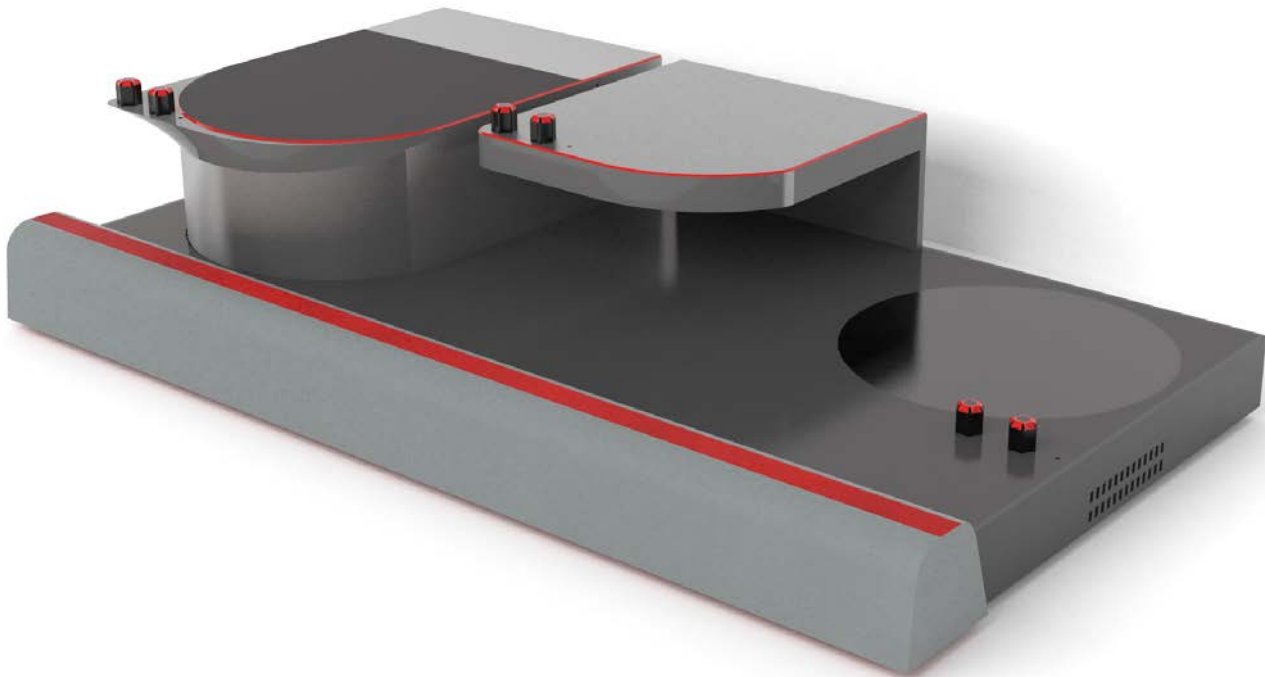


www.coroflot.com/DaniOwden

Individual Project: Intuitive Implements - Triplicity

Triplicity takes the complication out of cooking. On a completely smooth surface it allows you to heat, grill and boil. Through the use of technology the Triplicity can be used by a wide market; specifically the elderly sector due to ease of use.

Triplicity is a work top appliance which enhances the heating experience in the kitchen.





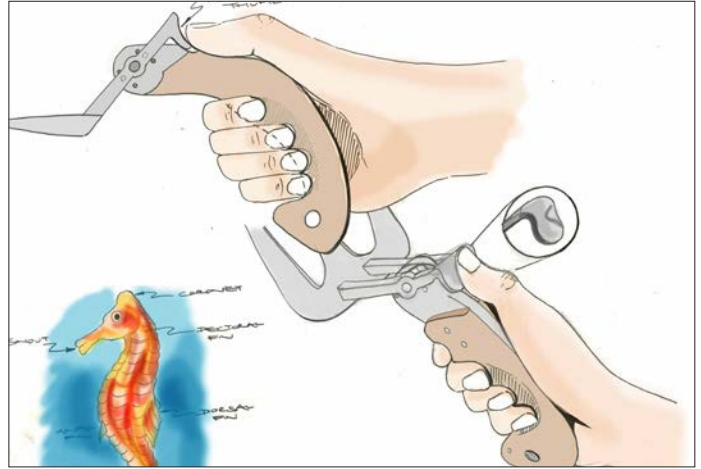
Matthew Pilgrim

Product Design
Technology



Individual Project: Trowel

The Trowel is a trowel re-design which aims to help people with physical disabilities access the opportunities that gardening provides. It is designed to create a sense of well-being for the user.





Trowell 

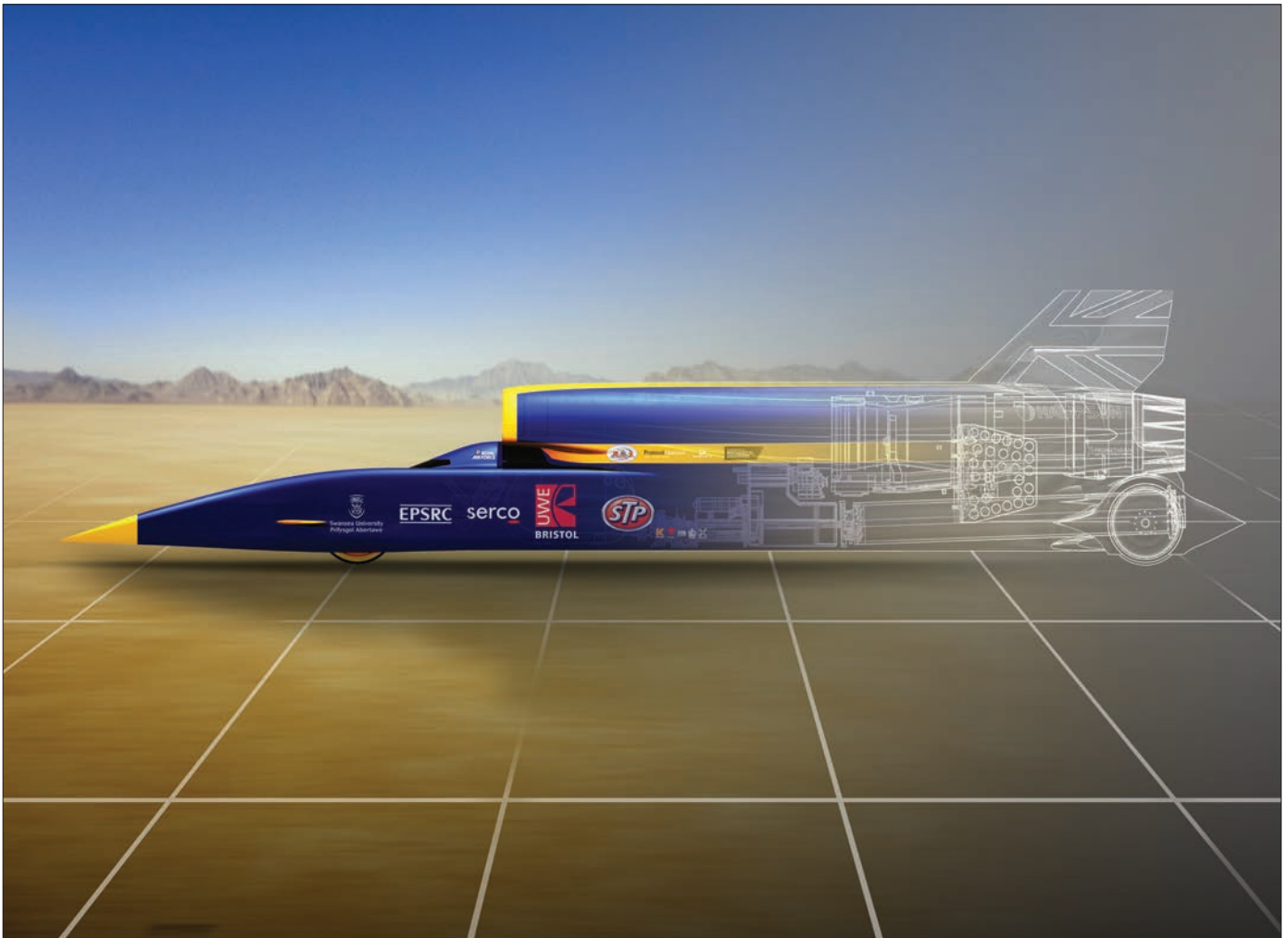
Holly Papadopoulos Individual Project: INK

Product Design
Technology

Placement:

BloodhoundSSC
Work : Sitec Group Ltd.

Self-injury numbers are on the increase and many look to distractions and alternatives to break the cycle of Self-Injury. INK is a tool that will assist in alleviating tension by calming and redirecting the sufferer, thereby reducing self-injury. INK is a product developed with the user for the user.







Matthew Stubbs

Product Design
Technology

Placement:

ARNO GB

www.matthewjstubbs.com

Individual Project: 'peel' and 'grate'

'Peel' and 'Grate' are the start of a new range of fun cooking tools/toys to actively involve children in preparing meals and snacks.

'peel' is a push-along vegetable peeler, slicer and corer.

'grate' is a rip-cord pull grater that utilises a planetary gearbox to allow a child to easily grate vegetables.



peel
play. eat. educate. learn



Studio 5 - Piper Moto

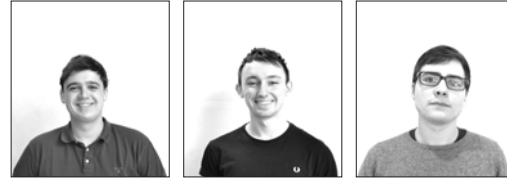
A black and white photograph showing a hand holding a sign that says "make". The sign is made of a dark, textured material, possibly metal mesh or perforated metal, with the word "make" cut out in a bold, lowercase, sans-serif font. The hand is positioned at the bottom of the frame, holding the sign. The background is a blurred city street at night, with bright lights and a person walking in the distance.

make

Piper Moto Trade Display

Designed for exhibition space, the Piper Moto stand not only displays the bike, but also the colour options, by adding a splash of colour to the back of the display.

Inkeeping with the theme of craftsmanship, hand crafted engine parts are displayed, which reinforces the british heeritage embodied by the company. w



Piper Moto Top Box



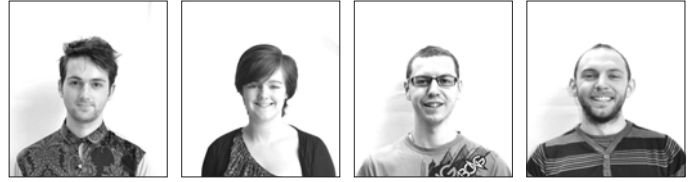
A 50's neo-classically styled sliding top box concept that allows a second pillion passenger to be accommodated if required. The unit slides along rails fixed to the body of the bike to allow a pillion seat to be applied. Designed with ease of storage in mind, it holds everything needed for day to day travel and can be left on the bike at all times.



Piper Moto Luggage System

PLAY . WORK . LIVE is a bespoke luggage range. Designed to fulfil the needs the rider perfectly. Luxury and convenience are the aspects of the range which is made up of:

- A soft Leather Holdall, with custom umbrella
- Two slim Panniers, where one functions as a briefcase.
- A Traveller Case, with presentation drawer and custom compartment for leather holdall featuring a raising floor.

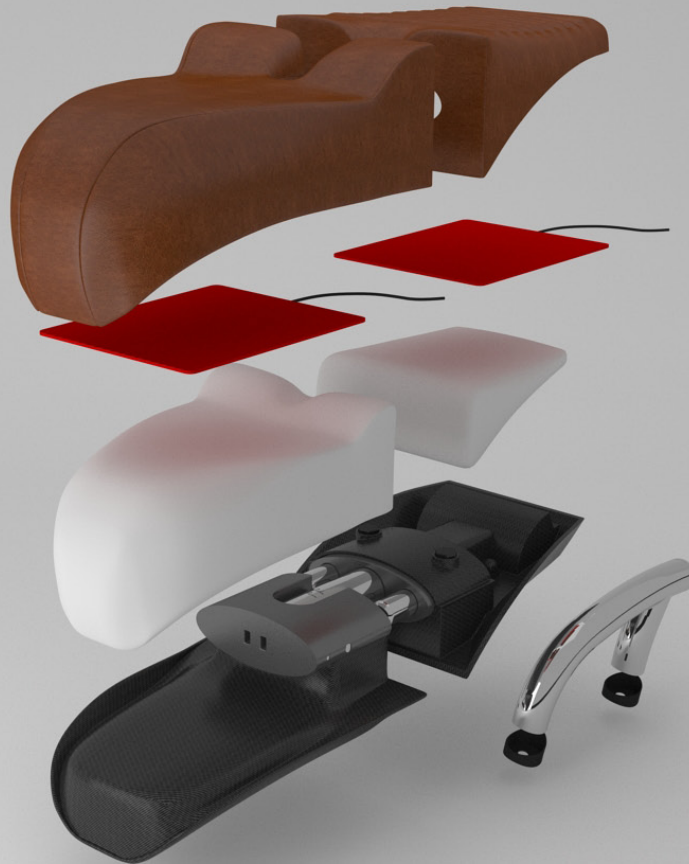


Piper Moto Rider and Pillion Seat



Combining neo-classic 50's styling with high performance motor sport engineering, 'The Scorpion' was formed.

The design allows the pillion seat to be flipped into a luggage mounting point. This feature was included to enhance the flexibility of the seating system without the need for removal of the pillion seat.



Thanks to...

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