

### STUDENTS DESIGN GROUNDBREAKING SOLUTIONS FOR HEALTH AND WELLBEING

#### Made in Brunel, Oxo Tower Wharf

A wearable device to detect concussion in contact sports, a recycled silicone suture pad training device for doctors, a wrong-site regional nerve-block prevention device, a personal cooling device for commuters to reduce the risk of heat related illnesses, and a couple's vibrator designed to tackle 'the orgasm gap' are just five of over 100 projects developed by the 2023 graduates of Brunel University London on show at **Made in Brunel Cutting Edge**, Oxo Tower Wharf, 15-18 June, admission free.

Many of the student projects are collaborations between Brunel University London and external organisations including Guy's and St Thomas' Hospital, Limbs and Things and STYLIDEAS; with Brunel students working with real-world briefs to produce solutions that can be implemented into the market.

Part of **New Creatives**, Oxo Tower Wharf's graduate season, Made in Brunel Cutting Edge showcases an extraordinary variety of design ideas solving everyday problems. Discover inspiring design solutions from the ingenious individuals shaping our future. Here's just a handful.



#### **DYAMOTECH M1: Alex Boaler**

DYAMOTECH enhances the safety of athletes and sports enthusiasts by providing timely and accurate concussion detection allowing for prompt medical attention and appropriate care. Placed as close to the base of the skull as helmets allow, DYAMOTECH M1 measures acceleration change and rotational forces to reliably track the forces the brain experiences. It alerts the wearer to the suspected concussion via visual and phone systems. It can perform independently or connected to its companion app. When a set threshold is met (based on age range and gender) the device delivers a visual alert and phone notification.

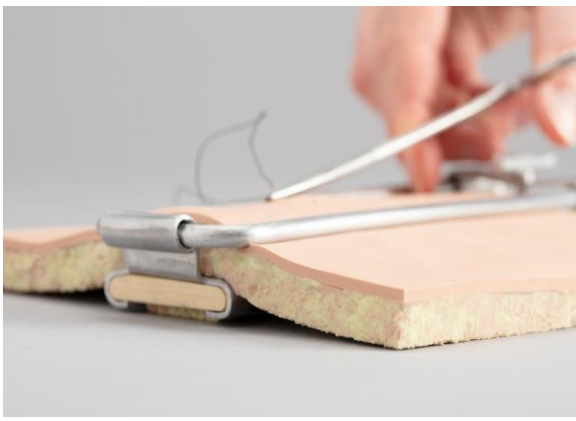
This is a Collaborative Project with DyamoTech.



#### **Block-Check: Jacob Williams**

Designed in collaboration with Guy's and St Thomas' Hospital, Block-Check is a wrong-site regional nerve-block prevention device. It uses speech recognition to allow clinicians to progress past a forced stop and perform the nerve block. Regional nerve blocks are a form of local anaesthetic, performed under ultrasound guidance. They are used where possible to reduce the need for general anaesthetic or traditional painkillers. The procedure is completed in specific locations, which carries the risk of the block being performed at the wrong site. Block-Check enforces the completion of a safety-stop directly prior to needle insertion by removing power from the ultrasound probe used to complete the procedure. Speech recognition is used as a hands-free authorisation method, ensuring the clinician is ready to block the correct location.

This is a Collaborative Project with Guy's and St Thomas' Hospital.



#### **EcoStitch: Rebecca Mellor**

Waste silicone has been recycled into a suture pad training device. Doctors can practice closing wounds on a pad that has true to life textures and retention of sutures. At the end of its life, it can be recycled again. EcoStitch comes with a stand to improve user experience. Feedback from doctors and surgeons: “The recycled nature is a big selling point. I’d choose this over others as I’m aware of the amount of medical waste produced”; “Having a recycled pad is a good idea”; “The pad is easily manipulated and the realistic textures would be beneficial to learning stitches”; “I can see a use for the variable insert as a decision tool, the user has to decide where a deep tissue suture is needed.”

This is a project in collaboration with Limbs and Things.



#### **Aero: Personal Cooling Device: Oliver Davis**

Aero is a device designed for commuters to reduce the risk of heat related illnesses. With an ergonomic design and temperature measurement, it acts as a wearable thermoregulatory device. Using the thermoelectric effect, which transforms heat into energy, and a thermostat circuit, Aero creates cold air. Its curved design and accompanying mounts allow it to be positioned on effective cooling spots around the body.

This is a project in collaboration with STYLIDEAS.



#### **Pulse by STYLINTIMATE: Harvey Badcock**

Pulse is an ergonomically designed couple's vibrator designed to tackle 'the orgasm gap' – the disparity of sexual climax between couples in a cisgendered heterosexual relationship. The main causes of this are miscommunication and personal insecurities. Pulse's dedicated charging case doubles as mood lighting providing users with a form of nonverbal communication. The integrated heart rate sensor controls the intensity of mood-lighting emitted from the case so that users can see their partners enjoyment without verbal communication. Its non-phallic form makes Pulse less intimidating, and its discrete grip retains skin-on-skin contact allowing couples to maintain focus and intimacy with one another and feel directly responsible for their partner's experience.

This is a project in collaboration with STYLIDEAS.

**Made in Brunel Cutting Edge** takes place at Bargehouse, Oxo Tower Wharf, Bargehouse Street, South Bank, London SE1 9PH, 15-18 June, 11am-6pm daily, admission free. More info [www.oxotower.co.uk](http://www.oxotower.co.uk) or social media [@oxotowerwharf](https://twitter.com/oxotowerwharf)

## **NEW CREATIVES 2023 PROGRAMME**

22-25 June, 11am-6pm, Bargehouse

### **Aquae Sulis**

Bath School of Art, Film & Media, Bath Spa University

An exhibition of third-year students' work from Creative Arts Practice, and third year and masters students' work from Fine Art, including painting, sculpture, photography, ceramics, and textiles.

30 June-2 July, 11.30am-7.00pm (4.30pm on 2 July), Bargehouse

### **Balance**

The Royal Welsh College of Music & Drama

A showcase of performance design from 30 graduating designers and makers including designs and artifacts created for productions, projects and films made at the College and as part of external collaborations.

14-16 July, 11am-6pm (11am-3pm on 16 July), Bargehouse

### **Interior Educators**

A showcase of the award-winning projects from interior design students from institutions across the country. There are six Award categories including climate emergency and sustainability, social justice, and interior futures. The show celebrates academics and students and the amazing work they have produced in 2023.

## ABOUT US

### **Oxo Tower Wharf / inspiring creativity**

Oxo Tower Wharf is an award-winning mixed-use building, home to a creative community of designer-maker studios and showrooms, gallery and event spaces, shops, and cafes all at the heart of London's South Bank and Bankside. Right on the riverside, visitors can browse, buy and commission from independent small businesses ranging from fine jewellery, luxury ceramics to neon lighting, leather goods and much more, in addition to fine dining at the world-famous roof top restaurant. The iconic building with its famous art deco tower is owned and managed by Coin Street, a local social enterprise creating a thriving, diverse, and welcoming place for people to live, work and play. Visit: [www.coinstreet.org](http://www.coinstreet.org) | Instagram: [@oxotowerwharf](https://www.instagram.com/oxotowerwharf)

## PRESS CONTACT

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