

RSA

Embargoed: Not for publication or broadcast before 00.01 Hrs Friday 8th May 2009

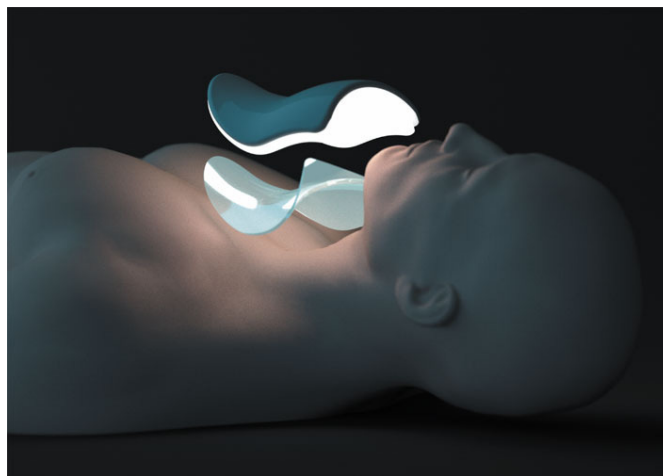
The Future of Anaesthetics

Friday May 8th

Two young designers, May Wilson and Jonathan Allott, have won a prestigious RSA Design Directions award for their work predicting what the future of healthcare could look like.

Going in to hospital for an operation represents a supreme act of trust and a key element in this process is the anaesthetist, whose job it is to sedate the patient and take over all life functions during surgery that could not otherwise be survived. The RSA's brief was to imagine how healthcare, and the role of the anaesthetist in particular, might change in the future and to explore the opportunities for innovation in this vital process.

May Wilson's (Loughborough University, Aircraft Medical Award £7,500) future-focused thinking took as its starting point the particular needs and risks involving obese patients. With the World Health Organisation predicting 700 million obese people by 2015 worldwide, she wanted to concentrate on the risks obese patients would face in surgery such as increased respiratory resistance and airflow limitations. Patients with large neck masses make it difficult to identify anatomical landmarks and so her proposal for a graphical display of the anatomy on the patient's neck, allows the anaesthetist to make an accurate judgement on the location of the trachea. It combines with a portable display showing the location of veins and arteries so any obstructions can be identified before surgery and sonar technology allows distances to be detected acoustically to prevent over incision and damage to the tracheal wall.

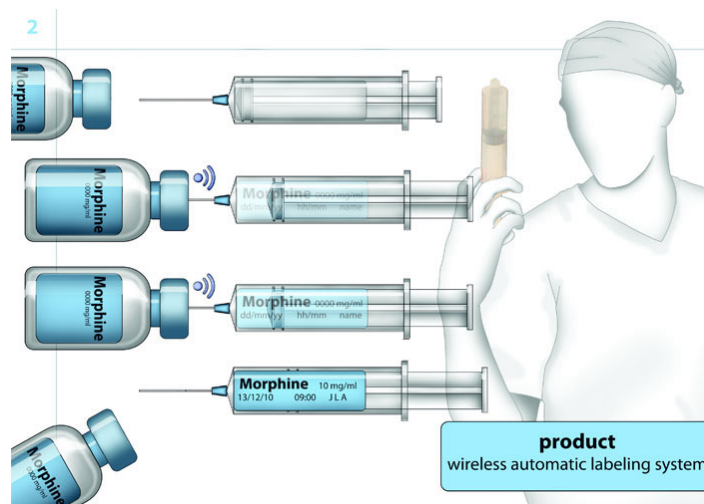


Jonathan Allott's (The University of Nottingham, The Aircraft Medical Award for Design of £1,500) action research, involving doctors and patients, identified drug administration as a

function of the anaesthesia process much in need of attention. His proposal illustrated a quick, electronic labelling system, requiring little effort from the anaesthetist, whereby the information from the ampule is transferred automatically onto e-paper once the syringe begins to fill from it. Jonathan's research indicated that even by today's standards, the technologies used are low cost and likely to drop even lower in the future. He foresees one minor change only to the existing syringe design so he predicts that manufacturing can remain largely the same and could be used in conjunction with existing barcode system.

Commenting on the winners, RSA Head of Design, Emily Campbell said:

"Wilson, and Allott demonstrated once again how much designers have to contribute to technological medical advances in terms of making devices communicative and legible to users. The RSA is proud to honour these outstanding examples of ingenuity and judgement in young designers who continue the long history of our student design awards."



Notes to Editors

1. For more information contact Luke Robinson, RSA Head of Media on 020 7451 6893 or luke.robinson@rsa.org.uk
2. The RSA developed this project with support from Aircraft Medical
3. A full list of the Design Direction award winners can be found at www.rsadesigndirections.org
4. Design Directions is the RSA's annual design awards in which students are challenged to address intractable social problems through innovative new design.
5. Design Directions is the UK's leading competition for 'socially responsible' design. The RSA established its first awards scheme for students in 1924 and today this unique scheme identifies, supports and rewards the most promising and creative students.
6. Worth over £60,000 in prize monies, comprising cash and work placements, the awards provide financial and practical assistance to student designers starting out in their careers.
7. This year Design Directions received 800+ entrants. There were 30 winners. There was a choice of 11 briefs to which students could respond, proposing solutions to ways in which design could make useful and meaningful interventions in a variety of situations.

8. The RSA is grateful to the following organisations who supported Design Directions in 2008/09: Calouste Gulbenkian Foundation; Garfield Weston Foundation; Kalyx; GlaxoSmithKline; Royal Mail; Home Office; Design Council; Forum for the Future; The Worshipful Company of Tin Plate Workers; Engine Service Design; CIM Charitable Trust; Aircraft Medical; Design against crime research centre; Springetts; Waitrose; NCR; Wolff Olins