# Partnership to extend shelf-life

**The University of Manchester and Syngenta have launched University Innovation Centre (UIC) will develop sensor sciences for applications in agriculture and the food supply chain.**

One of the first research projects in the Syngenta Sensors UIC portfolio aims to develop devices that allow retailers to set more scientific and meaningful best before dates by accurately predicting shelf-life in fruit and vegetables.

The Centre has already secured more than £500k of funding from the UK government's Technology Strategy Board to develop next generation sensor technology for supply chain monitoring.

The new sensors, based on radio frequency identification (RFID) tags, will record stress factors throughout the fresh produce supply chain process and wirelessly transmit these forward.

Integrating this data with knowledge of the produce biology and farming practices the whole chain for fresh produce supply may be better understood and the possibility of wastage minimised.

Dr Bruce Grieve, Director of the UIC, said: "The idea is simple but previously the need to have an internal power supply and means of storing and transmitting the data made the sensors too expensive and cumbersome to be viable".

"Our research aims to develop smaller simplified sensors that will operate rather like Oyster cards on the London Underground. They will use a battery-free method to store data and then receive pulses of energy from transmitters that will provide just enough power to transmit their data in return."

Chemists, engineers and physicists will work together to develop low-cost technology - and potentially bring the individual sensor cost down to less than $0.10 instead of the current price of between $10 and $50.

Syngenta have a long history of collaboration with Universities worldwide. The formation of the Sensors UIC represents a new model for strategic partnership between the University and Syngenta, covered by a formal long-term agreement.

# MSP tenant

**Proteintech, a Chicago-based company that started its European operation in the Manchester International Innovation Centre (MIIC) on Manchester Science Park (msp), is graduating to msp office space in Kilburn House to become a "full" msp tenant.**

Companies in the MIIC are all from overseas; the MIIC provides them with a 'soft landing' to establish their business in the UK, or to assess the viability of expanding into the UK and, for some, using Manchester as a base for their European operations.

The companies are supported with assistance from MIDAS (Manchester's inward investment agency) and from msp's own business support programme. Proteintech's business here is developing very successfully and they receive orders from universities throughout the UK; Manchester Science Park, with its proximity to the University, has obviously been an ideal start for this stage of the company's development.

Proteintech's mission is to develop and manufacture a wide spectrum of antibodies against all human proteins known as the Human Antibody Projects, thus providing the most effective tools for the identification and quantization of the vast number of known or unknown disease markers. The company's principal R&D activity is in Chicago and in Wuhan (which is twinned with Manchester), but they will be carrying out R&D here in Manchester within the next three years to further the diagnostic applications of those antibodies they have developed


# Innovation awards

**NHS trusts across Greater Manchester have swept the board at the fifth TrusTECH North West innovation awards including a team led by Rachel Belk (pictured) a PhD student at the University and genetic counsellor specialising in deafness.**

The awards recognise NHS employees and teams who have used innovative ideas, services and medical products to help improve the care that patients receive. Among the winning Trusts were Central Manchester and Manchester Children's University Hospitals NHS Trust, who were recognised in the 'Software or Systems Category' of the regional awards for a novel application of voice recognition software that would improve care for deaf patients.

The voice recognition software that was pioneered by Rachel and the team at the MRI and Hope Hospital, will significantly improve care for patients with profound acquired deafness. The software is used to record and transcribe a consultant's speech onto a screen so that the patient can fully understand and be involved in what is being said to them. Rachel Belk said: "To enable a patient to make an informed decision they need to be able to discuss detailed information with healthcare professionals."

Rachel was also short listed for the national awards event run by the National Innovation Centre on Monday 3 December at the Wellcome Trust in London.

Dr Richard Deed, TrusTECH Innovation Unit Manager, said: "This year's awards have seen some excellent examples of innovation. The winning NHS trusts from across Manchester have shown that their innovations can improve the lives of patients and they should be congratulated for their excellent achievements. I am sure these innovations will continue to provide many benefits to patients for years to come."

Each Trust received £1000 to spend on ensuring their innovative entries improve the care that patients receive.