

## Newcastle University Preventing Future Artificial **Lessons Learnt: Joint Failures**

On Saturday 21<sup>st</sup> April 2012 Newcastle University's School of Mechanical and Systems Engineering and Policy, Ethics and Life Sciences (PEALS) Research Centre held a groundbreaking event in London. The multi-disciplinary colloquium "Lessons learnt: preventing future artificial joint failures" attracted a wide audience including surgeons, engineers, industrialists, students and, perhaps most crucially, people whose lives have been affected by failed metal-on-metal hip implants. As well as the obvious concerns over pain and lack of mobility, people with failed artificial joints spoke of unemployment, problems at work, fears for the potential health problems in the future and an inability to care for themselves and their families.

Following presentations from experts, workshops, consisting of the various groups of stakeholders, discussed the issues presented and then fed back their consensus opinions on what could be done to prevent future artificial joint failures. The following key points emerged from the discussions:

- Arguably the most important ethical principle in medicine is 'do no harm'. The failure of some makes of artificial hips has led to serious, harmful consequences for patients. Attendees asked why such joints are on the market when it is unclear what, if any testing of them has been undertaken. There needs to be wider testing and transparency of test results. Transparency is vital so that all groups have trust in the medical system.
- The Medicines and Healthcare products Regulatory Agency (MHRA) claims to enhance and safeguard the health of the public by ensuring that medicines and medical devices work and are acceptably safe. This claim was rigorously challenged and it was concluded that the current medical devices regulatory system is not fit for purpose.
- Pre-implantation testing of artificial joints should be undertaken by a not-for-profit body with independent engineers.
- The establishment of an independent retrieval lab to examine failed artificial joints, in order to analyse how implants wear and fail and then report on them, should be a priority.
- Patients felt they could have been better informed at all stages of their treatment and would have welcomed being able to discuss the choice of implant with their surgeons. Surgeons should act upon patients' concerns about symptoms.
- Any research body that can show that there is a case for challenging designs of implants in the marketplace should be able to request and receive all relevant information from all manufacturers of those designs of implants. Such requests could be managed by the MHRA. The aim is to produce a culture where earlier warnings are investigated.