

Oxonians at large is edited by Alicia Clegg

Engineering envoy has her head in the stars, but her feet are firmly on the ground

'I still can't believe that stuff I made has sat on the surface of another planet, and that I sat in mission control telling it what to do,' says Hanna Sykulska-Lawrence (St Catherine's College 2000).

Two years ago, while she was completing her PhD at Imperial College, Sykulska-Lawrence spent the summer at NASA instructing microscopes, which she and her colleagues had built, to collect samples of Martian soil for analysis. 'It was all very exciting,' she says of her role in NASA's Phoenix mission to Mars, 'especially being the first person to see new images sent back to Earth.'

Now 'back in Earth time' – for the duration of the project she had to adapt her body clock to the Martian day, which is over half an hour longer than an Earth day – she has returned to Oxford to do postdoctoral

research. In the long term, she has her eye on the next planned mission to Mars in 2018, as well as other possible missions to the moons of Saturn and Jupiter.

Her other big professional enthusiasm is encouraging more young people to become engineers. At the end of 2008, she won the Institution of Engineering and Technology's Young Woman Engineer of the Year Award and spent last year as its ambassador, attending party political conferences and promoting engineering to the public and schoolchildren.

'In continental Europe the word for engineer is associated with ingenuity of thought and the idea of genius,' she observes. 'But in Britain, people still picture an engineer as a man in overalls with a spanner. It's an image that we have to overcome.'



A life on Mars: Hanna Sykulska-Lawrence is researching new technology for measuring conditions on the Red Planet

A combat survivor turns life-rebuilder

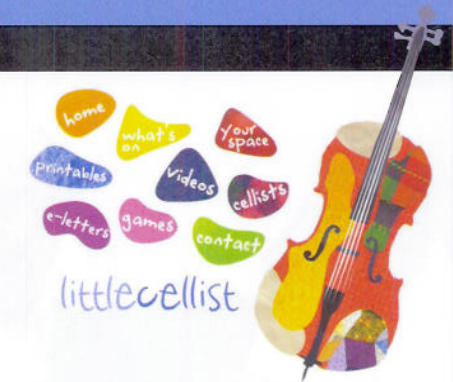
For his DPhil, Rhodes Scholar Eric Greitens (LMH 1996) worked with survivors of ethnic cleansing and genocide. Now, as the founder of a not-for-profit organisation, The Mission Continues, he is using his understanding of the psychology of recovery to help injured servicemen and women rebuild their lives by serving their communities.

Three years ago, Greitens was serving as a naval sea, air and land officer in Iraq, when a suicide truck bomber hit his unit. He got off with minor wounds. Others were not so lucky. Having suffered disabling injuries, they were no longer fit to serve in the military and found themselves facing an uncertain future as disabled civilians without jobs. 'When wounded veterans come home, they are often the recipients of much well-meaning charity. But, what they most need is to find a way of rebuilding a purposeful life,' Greitens says.

The Mission Continues, which Greitens started in the United States and hopes to take around the world, challenges veterans to work for a charity doing something that plays to their strengths. As an example he mentions Mathew, a naval veteran 'who liked kids and horses'. Through the organisation's fellowship programme, Mathew spent six months at an equi-therapy centre, mentoring physically and mentally disabled children. He proved so good at the job that the centre hired him on a full-time basis. Other veterans have worked with elderly people, supported former comrades in hospital, mentored teenagers and retrained as teachers and nurses.

'In the past, injured veterans were seen as problems,' says Greitens. 'Our ambition for this generation is that society will see them as assets.'

www.missioncontinues.org



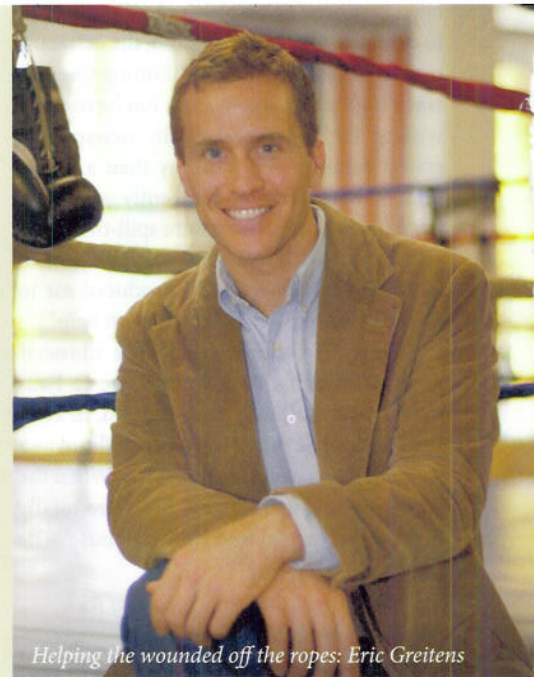
Children's cello club strikes a chord online

'As a child, I felt music was a club that I couldn't belong to,' says Deborah Sacks (New College 1990). Now, as a parent, she has set up littlecellist.com, a playful online club aimed at 'demystifying' music, which any child can join.

Sacks started the club after watching her daughter, Sarah, trying to master her cello. 'I was shocked at how difficult it is. It is such a lovely instrument, that I really wanted to do something to encourage children to play.'

On one level, the online club serves as a noticeboard for courses, concerts and master classes. On another, it is simply a place where children have fun. One section links to cello games and videos. Another has interviews with children's writers and such famous cellists as Julian Lloyd-Webber, Yo-Yo Ma and Steven Isserlis, the club's honorary patron. There is also a 'Your Space', where children share their compositions and swap jokes and stories, and a section with ready-to-print resources, including a practice calendar recommending 'top tips for getting out of your cello practice and tricking your teacher'.

The site has gone down a storm with the music press and bloggers. Now, Sacks is launching a new project, 'getcomposing', which Sir Peter Maxwell Davies is backing, to encourage children to compose their own music. www.littlecellist.com



Helping the wounded off the ropes: Eric Greitens