

## Well connected

*Beyond textbooks ... taking medical education online*

In 2008, Dr Mike Cadogan set up a small blog to record his preparation for the emergency medicine fellowship exams.

His study technique had involved writing summaries of books and journal articles, so he had amassed a collection of one-page summaries on various topics. He had also collected about 100 000 clinical images, all of which had patient details and signed consent forms.

"The blog was a means of trying to get some data together, mainly for my own purposes because I had it all scattered on various hard drives, but I thought if I put it out there maybe a couple of people might see it", he says.

In the first year, a few hundred people each week visited the blog, *Life in the fast lane* ([lifeinthefastlane.com](http://lifeinthefastlane.com) (<http://lifeinthefastlane.com>)), but the traffic soon increased.

Now the blog attracts about 20 000 unique visitors each day and, in May this year, the site had its 5-millionth unique visitor.

Dr Cadogan is writing a paper with some of the world's top emergency medicine bloggers, with the aim of creating a 'blog impact factor' similar to the journal impact factor. While doing this research, Dr Cadogan has realised just how popular his blog is.

"It is great to see the emergence of medical blogs as a source of medical information, education and debate with 100 000 readers visiting the top 20 medical blogs on a daily basis."

The blog, which now has several other authors as well as Dr Cadogan, includes a wealth of detailed clinical information. There's an electrocardiogram (ECG) library that combines 5000 ECG images and cases with specifics on ECG clinical interpretation and links to reference sources. There is also a comprehensive clinical care compendium, a toxicology overview and more than 200 clinical cases.

The site also has an exam section with links to emergency medicine fellowship exam questions from recent years, including images and resources by topic.

Following the success of his blog, Dr Cadogan branched out to other online education projects including iMeducate ([www.imeducate.com](http://www.imeducate.com) (<http://www.imeducate.com>)) and the recently launched Global Medical Education Project ([gmep.imeducate.com](http://gmep.imeducate.com) (<http://gmep.imeducate.com>)). This project encourages users to submit, answer and provide feedback on multiple-choice questions in an open peer-review process, where users can rate the difficulty of questions, and provide references to the questions. Users can also upload clinical media including images, video and powerpoint presentations to create an online education database.

Dr Cadogan says while medical education has been transformed through social media such as blogs, podcasts and vodcasts, traditional forms of medical education such as the colleges and journals could embrace online opportunities a lot more.

He says he regularly uses clinical techniques that he has learnt from audiocasts or vodcasts, such as the Lewis Lead technique, which is a modified ECG lead system used to detect p waves in broad complex tachycardia.

"If I have a question about it, I'll write back. If I have an experience with it, I'll add a comment ... having that interaction with health professionals all round the globe is just fantastic."

Dr Cadogan says his main motivation for developing online projects is the same as his motivation for becoming a doctor — to help people.

"There's a lot of information out there which I'm happy to share and other people are happy to share. It annoys me when people hide things behind black boxes and logins and paid subscriptions."

In addition to the online projects — or hobbies as he calls them, as he doesn't make any money from them — Dr Cadogan continues to work full-time as an emergency medicine physician at Sir Charles Gairdner Hospital in Perth.

He grew up in the United Kingdom and studied medicine at the University of Edinburgh, and also studied at Oxford, before moving to Australia in 1998.

He is also team physician for the Western Force rugby union team, which includes travelling for overseas tours.

Somehow he has also found the time to set up a service called VIP Medicine, which provides medical advice and treatment to VIP visitors to Western Australia, with clients of the service including Michael Buble's entourage.

Dr Cadogan says the service, which again makes no money, is "just for fun" as it allows him and his family to interact with some of these luminaries.

His hectic schedule begs the question of time management, which Dr Cadogan says would be impossible without the help of online tools such as Google Docs and iPhone apps.

"I set myself a series of limits", he says. "Every day I do my day, come home and do the homework with the kids, and kick a ball and read to them, then I work from 8 pm to 2 am. Then I do it all again."