

## Future plans

### What next for behavioural medicine?

A number of future directions have been identified and organized around the theme of immune ageing. For example, research on the effects of acute eccentric exercise and response to vaccination will identify the parameters (e.g., extent and timing of exercise) related to immune enhancement, and then move to a control trial of exercise effects in an older population receiving their annual influenza vaccination.

Similarly, the research on cytotoxic T-cells and latent viruses will be developed to test a particular model of immunosenescence. The group has largely concentrated on viral immunity, but there is a growing interest in bacterial immunity and the sensitivity of neutrophils to behavioural influences. Colleagues in the School of Medicine have demonstrated that hip fracture in older adults is related to a profound attenuation of neutrophil function. We are keen to test whether psychological trauma has similar effects as well as looking at the effects of acute stress on neutrophil function.

There is a growing interest in inflammation, which dovetails nicely with the developing interests in psychophysiology as well as those of colleagues in other research groups. Here, an increasing focus will be endothelial function in patients with inflammatory disease.

The research on the sensory and cognitive corollaries of elevated blood pressure is developing to embrace electroencephalographic and fMRI measurement. Indeed, a future theme will be the use of such technologies to illuminate the neural mechanism underlying a host of topics studied by the group.