

## AusSMC Media Briefing on the Science of Terrorism (21 Aug 06)

### Abstract

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**Dr Greg Simpson**  
**Deputy Chief, CSIRO Molecular and Health Technologies**  
**Director, Secure Australia Program**  
**President, The Royal Australian Chemical Institute**  
**Board member, Australian Science Media Centre (AusSMC)**

CSIRO has established the Secure Australia Program to coordinate and develop CSIRO's response to the Australian Government's National Research priority of Safeguarding Australia. This will enhance the security of Australian people, livestock, plants, environment and infrastructure with coordinated programs of innovative science.

More information on the CSIRO's website at  
<http://www.csiro.au/csiro/content/standard/psuy,,.html>

In tackling terrorism science and technology is only part of the answer – it has to work in collaboration with intelligence, which is what proved so important in London recently.

#### **The terrorist threat:**

In the Australian context we have particular difficulties. In US and Europe the population lives in clusters so infrastructure and networks tend to be in hubs. If one is attacked it can be bypassed and the others will take over. Australia's linear pattern of population means if one centre goes down we are much more vulnerable. Also our borders are very long and hard to patrol so it's important that border protection agencies, customs, etc., work closely with research groups to develop state of the art technologies and devise solutions to the terrorist threat.

Traditionally we have relied on taking samples sending to the lab for analysis but the technology is moving more towards radio linked hand held detectors that will give results immediately and that's a big challenge.

Other considerations are developing technology that will not clog up airports. You can't strip search everybody. There is technology that will see right through clothes. That would speed up the process but that brings up privacy, rights of the individual and cultural issues. Australians may not be so bothered but for some cultures that wouldn't be possible.

Also being developed are surveillance techniques designed to spot people and behaviour. One example of non invasive screening would be to divide travellers into two streams. People that show through their body language, that they are unlikely to pose a threat are channelled one way and those that may need further examination, are channelled into another area.

## **Greg Simpson Abstract (Continued)**

### **Australia's Science Engineering & Technology research effort:**

The CSIRO and other agencies, as well as private sector, are working with the government to develop technologies in response to all threats – environmental, criminal and counter-terrorist.

### **Greg will also describe briefly some of the current counter-terrorism research areas, such as:**

- Detection technologies to enhance the ability of agencies to intercept illicit materials
- Understanding and managing major bioterrorist disease outbreaks
- Hand-held sensors for the detection of chemical and biological agents
- Ad-hoc indoor positioning networks for emergency personnel
- Plume disbursement modelling software
- Threat risk assessment methodologies
- Multi spectral imaging and sensing technologies
- Complex system science modelling to protect our business systems and infrastructure

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Contact: Australian Science Media Centre  
PO Box 237  
RUNDLE MALL SA 5000  
Ph: 08 8207 7415 Fax: 08 8207 7413  
Email: [info@aussmc.org](mailto:info@aussmc.org) Web: [www.aussmc.org](http://www.aussmc.org)

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