



# Growing tall poppies

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SCIENCE REPORTER**

USING mathematics to solve complex problems is like being a detective, says South Australia's tallest scientific poppy, young researcher Dr Tamath Rainsford.

From a crop of 10 early career researchers who were last year named Tall Poppies of SA science, Dr Rainsford won the top prize.

Nominations for the 2009 Tall Poppy Awards open today.

The University of Adelaide lecturer in electrical and electronic engineering visits schools to promote science, as do her fellow tall poppies, and says she is proud to be a role model for students looking into future career paths.

"Often you have an idea about how something might work and then when you prove it mathematically, there is a really surprising and exciting moment when you realise that the world truly is that way," Dr Rainsford said.

"It makes you realise how much more there is out there to discover. It is as if everything is already known but somehow hidden - it's a bit like being a detective."

As a child, Dr Rainsford wanted to learn about black holes and the "big bang" theory of how the universe was created. She fell in love with mathematics



**DETECTIVE:** Dr Tamath Rainsford tests the reception of a mobile phone in a special chamber at the University of Adelaide.  
Picture: GRANT NOWELL.

along the way and now works on a wide variety of problems, from the design of mobile communications systems for urban areas, to the detection of skin cancer and the development of a bionic eye.

"Communications is the obvious thing but my original idea was to model electromagnetic radiation. It's actually a really general model that can be applied to lots of different problems."

The Australian Institute of Policy and

Science began the Tall Poppy campaign in 1998 to promote Australian scientists.

The winner of the 2009 Tall Poppy of the Year will be presented with \$15,000 at the Science Excellence Awards dinner in August during National Science Week. Nominations close on June 5.

Nominations are also being sought for the South Australian Scientist of the Year, who will receive \$50,000, while category winners will receive \$10,000 towards their research project.