

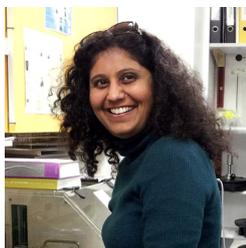
Recent Prizes in Mycology

AMS 2012 Student Prizes (Awarded at the AMS Scientific Meeting, Cairns, 26-28 September)

This year the Jack Warcup prize was shared between two student members for outstanding talks on their PhD research.

Shilpa Patel, Center for Infectious Diseases and Microbiology, Westmead Hospital, University of Sydney. Isolation and Identification of *Scedosporium* spp. in Cystic Fibrosis Patients. S. Patel, W. Meyer, TC Sorrell, C. Halliday, K. McKay, D. Andresen, P. Middleton, P. Cooper & SC-A Chen

Shilpa Patel completed an MBBS and MD (microbiology) in India then worked for several years in the field of diagnostic microbiology. She then came to the University of Sydney in 2010 and undertook the M. Med. (Infection and Immunity) before commencing her PhD in March 2011. Her research project is investigating filamentous fungal infections in cystic fibrosis (CF) patients. She is especially interested in the clinical risk factors, impact of fungal infection on lung function and significance of pathogen-pathogen interactions in CF patients. Part of her study involves comparing conventional and molecular methods for diagnosis of fungal infections. Shilpa intends to pursue a medical degree in infectious disease after completing her PhD and hopes to combine her research with diagnostic and clinical practice.



Shilpa's conference presentation reported on the isolation and identification of *Scedosporium* spp. in cystic fibrosis patients. Respiratory samples from 177 children and 81 adults with CF were cultured. Restriction fragment length polymorphism (RFLP) analysis of the ITS1/2 region was used to identify *Scedosporium* species. *Scedosporium* colonization was evident in 11.1% adults and 11.8% children by culture, 4.9% adults and 6.2% children were colonized with *S. prolificans* whilst *Pseudallescheria boydii* complex (*Scedosporium* teleomorph) were recovered in 7.4% adults and 6.2% children. Based on the ITS-RFLP analysis of 54 isolates, 35.1% were *S. aurantiacum*, 20.3% were *P. boydii*/*S. apiospermum* and 44.4%, *S. prolificans*. DRBC was

necessary for the isolation of this fungus and ITS-RFLP accurately identified *Scedosporium* species and distinguished *S. aurantiacum* from other species of the *P. boydii* complex.

Melinda Greenfield, School of Marine and Tropical Biology, James Cook University. Biocontrol of Weevil Borers in Cavendish Bananas by the Endophyte *Beauveria bassiana*. MJ Greenfield, I. Newton, N. Dillon, D. Astridge & SE Abell-Davis

Melinda Green grew up in a small town called Oakville on the outskirts of Sydney and attended Windsor High School, leaving when 16 years old to work as a legal secretary. After a number of years working in the legal world Melinda decided to finish her schooling at TAFE



by completing a Tertiary Preparation Certificate. In 2006, Melinda moved to Cairns to study at James Cook University where in 2010 she completed a Bachelor of Science with honours. Over the next two years she worked for "Eliminate Dengue", a research project investigating the biological control of the dengue virus in *Aedes aegypti* mosquitoes. Melinda recently commenced PhD studies through the University of Queensland that aim to investigate Banana Bunch pests and options for their biological control.

The results of Melinda's honours project were the subject of her presentation at the 2012 AMS conference. This project aimed to establish if *Beauveria bassiana* growing endophytically in bananas has potential as a biological control agent of banana weevil borer (*Cosmopolites sordidus*). Four locally collected isolates of *B. bassiana* were used to inoculate tissue-cultured Cavendish banana plants. *Beauveria bassiana* was successfully reisolated from various plant parts for up to nine weeks after inoculation. Colonisation was greatest in the corm compared to the root, pseudostem and leaf and over time, colonisation decreased in all plant parts. Overall colonisation differed between the isolates tested. This is the first time *B. bassiana* has been artificially introduced into the Cavendish subgroup of bananas and the first time it has been reisolated from banana

leaves. Bioassays performed on *C. sordidus* established that levels of virulence exist between these isolates. Two isolates of *B. bassiana* have been identified for further research and development as a potential biological control agent of *C. sordidus*.

DANIEL McALPINE MEDAL

The Daniel McAlpine Medal is sponsored by the International Mycological Association (IMA) and is awarded to an outstanding young mycologist from the Australasian region. The award is intended for a mycologist in the early stages of his or her career (within 10 years of receiving their PhD).

Prize winner: Dr Ceri Pearce, Senior Plant Health Scientist, Biosecurity Queensland, Department of Employment, Economic Development and Innovation.

Dr Ceri Pearce was selected by the Australasian IMA Regional Mycological Organization for nomination for the IMC9 Daniel McAlpine Medal based on her research and her major contributions to the mycological community.



Her PhD research, which centred on the biology and taxonomy of Australian fungi, resulted in authorship of a book on the Phyllachoraceae of Australia. More recently, with her research now focusing on the increasingly important area of biosecurity, she has been involved in the development of diagnostic and emergency response systems for exotic and introduced pests in Australia. Ceri made major contributions to the mycological community through her roles on mycology councils, which includes executive councillor and librarian of the Australasian Mycological Society from 1998-2002, executive councillor for Australasian Plant Pathology Society from 2005-2007, and co-chair of the Regional Councillor Working Group of the Australasian Plant Pathology Society from 2005-2008. In addition, she won the bid and successfully co-organised the 8th International Mycological Congress in Cairns in 2006, which was the first time that this congress was held in the Southern Hemisphere. Ceri has also been involved in numerous mycological education and training programs, both within her organization and to agricultural industries, peers and school students.