



MEDIA RELEASE

4 July 2011

Can microbiology save Tasmanian devils from an immortal, parasitic and contagious cancer?

The Save the Tasmanian Devil Program is hosting some of the top minds in microbiology in a workshop to spark robust discussions about key management and research actions that could assist in the recovery of Tasmanian devils.

The Tasmanian devil – the world’s largest remaining marsupial carnivore – is threatened with extinction as a result of the emergence of a transmissible cancer, Devil Facial Tumour Disease (DFTD), which is spread by the direct transfer of living cancer cells through biting. During its spread across Tasmania, the original parasitic cell line has formed many new strains, and the challenge is to determine the best approach to this rare in fast-evolving disease.

Keynote speaker is Professor Steven O’Brien, in Tasmania for the Australasian Society of Microbiology’s annual conference, sponsored by the Save the Tasmanian Devil Appeal. Professor O’Brien has been Chief of the Laboratory of Genomic Diversity at the National Cancer Institute (NCI), National Institutes of Health (NIH) since 1986 and is recognized for his research contributions in human and comparative genetics, evolutionary biology, HIV/AIDS, retro-virology, and species conservation. He is considered the pioneer of the science of genetic epidemiology and played a key role in the Human Genome project to sequence the entire human DNA for the first time.

Professor O’Brien has founded and co-directs NOAHS (New Opportunities in Animal Health Sciences), a consortium of scientists and apprentices, part of the Smithsonian Institution/National Zoological Park, dedicated to applying biomedical technology on behalf of species conservation and to training a generation of conservation scientists.

The workshop will be attended by delegates from the Australasian Society of Microbiology’s annual conference and the Save the Tasmanian Devil Program.

Media invited to attend. Professor O’Brien and other speakers will be available for interview.

Date: Monday 4 July 2011

Venue: Tasmanian Function and Conference Centre, Elizabeth St Pier, Hobart

Time: 1:30 – 5:00pm

Media enquiries

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BACKGROUNDER

Can microbiology save Tasmanian devils from an immortal, parasitic and contagious cancer?

Workshop outline

The Tasmanian devil – the world’s largest remaining marsupial carnivore – is threatened with extinction as a result of the emergence of a transmissible cancer, Devil Facial Tumour Disease (DFTD), which is spread by the direct transfer of living cancer cells through biting. During its spread across Tasmania, this immortal parasitic cell line has formed genetically divergent subclones or strains. The Save the Tasmanian Devil Program was established to recover this keystone species, primarily through four management levers: (i) establishing a captive insurance population; (ii) suppressing the disease through active culling of infected individuals; (iii) identifying and translocating resistant genotypes; and (iv) developing a vaccine. The objective of this workshop is to spark robust discussion about key management and research actions that could assist in the recovery of Tasmanian devils. In the face of a unique and rapidly evolving disease this will require the latest techniques in conservation genetics, cancer research and vaccine development.

Invited speakers

- Professor Stephen O’Brien (US National Institute of Cancer: Experiences of species with low genetic diversity)
- Assoc/Professor Greg Woods (Menzies Research Institute, Tasmania: Development of DFTD vaccines)
- Dr Menna Jones (University of Tasmania: Devil ecology and conservation strategies)
- Assoc/Professor Kathy Belov (University of Sydney: Devil MHC)
- Dr Janine Duckworth (Landcare Research, New Zealand: Vaccinia virus)
- Dr Auder Fahrer (Australian National University: Freund’s adjuvant and cancer immunotherapy)
- Dr Anne-Maree Pearse (Save the Tasmanian Devil Program: DFTD evolution and chromosomal instability)
- Dr Tony Papenfuss (Walter and Eliza Hall Institute; genome and transcriptome)



Chair

Dr Chris Boland (Science Manager, Save the Tasmanian Devil Program)

The Save the Tasmanian Devil Appeal is administered by the University of Tasmania Foundation and is the formal fundraising arm of the Save the Tasmanian Devil Program. The University of Tasmania, in partnership with the Australian and Tasmanian State Government, launched the Save the Tasmanian Devil Program and Appeal to oversee the response to the disease and raise funds for vital research. The aim of the program is to maintain the Tasmanian devil as an ecologically functional species in the wild.