



Collaborations

Partnerships between the Save the Tasmanian Devil Program and research institutions across Australia have played an important role in furthering our knowledge of DFTD. They also provide access to a wide range of resources and facilities.

Current collaborations include:

Institution	People	Project Scope and Title	Management / Knowledge
Wildlife Management & Monitoring Section, Save the Tasmanian Devil Program, DPIPWE; +UTAS Zoology			
DPIPWE; UTAS Zoology	Menna Jones Stewart Huxtible Phil Wise	Disease suppression adaptive management	Disease suppression
DPIPWE; UTAS Zoology	Menna Jones Shelly Lachish Stewart Huxtible Kim Skogvold	Assessment of the size of the cryptic population	Insurance populations Disease suppression Extinction risk & process
DPIPWE; UTAS Zoology	Menna Jones David Sinn	Ageing protocols	all
DPIPWE; UTAS Zoology	David Sinn Clare Hawkins Menna Jones Chrissy Pukk Fiona Hume	Role of behavioural phenotype (personality) in susceptibility to DFTD	Spread of disease Rapid evolutionary response
DPIPWE; UTAS Zoology	David Sinn Menna Jones Lisa Cawthen Chrissy Pukk Sue Jones	Reintroduction protocols	Insurance populations Disease suppression Genetic resistance
DPIPWE	David Sinn	Developing protocols for Free Range Enclosures	Insurance populations
DPIPWE	Sam Fox Sam Thalmann	Movements of devils in relation to fences and landscape features by radiotracking	Insurance populations Disease suppression Genetic resistance
Diagnostic Section, Devil Program, DPIPWE			
DPIPWE	Stephen Pyecroft, Colette Harmsen, Sarah Peck,	Investigation of chemotherapy agents suitable for the treatment of Tasmanian Devil Facial Tumour Disease	DFTD tumour treatment
DPIPWE	Stephen Pyecroft, Sarah Peck, Colette Harmsen, Anne-Maree Pearse	Further characterisation of the Devil Facial Tumour in wild Tasmanian Devils (<i>Sarcophilus harrisi</i>)	DFTD epidemiology
DPIPWE	Xianlan Cui, Bobby Hua	Mapping biomarkers in DFTD serum using phage display	ELISA for Preclinical diagnosis of DFTD
DPIPWE	Xianlan Cui, Martine Cornish, Bobby Hua	Development of an indirect immunofluorescent antibody test for detection of DFTD antibodies	IFAT for preclinical diagnosis of DFTD and DFTD vaccine development
DPIPWE	Xianlan Cui, Bobby Hua, Kate Swift, Colette Harmsen, Pamela Hodson	Development of a novel DFTD tumour vaccine	Vaccine development
DPIPWE	Xianlan Cui, Martine Cornish	Development of DFTD-specific monoclonal antibodies	Clinical diagnosis of DFTD
DPIPWE	Anne-Maree Pearse, Kate Swift, Linda	Genetic evolution of DFTD in the wild devils	Tumour characterisation and evolution



	Donachie, Robyn Taylor		
DPIPWE	Anne-Maree Pearse, Kate Swift, Robyn Taylor, Linda Donachie	Use of Tasmanian devil BAC library to investigate chromosome 5 evolutionary relevance to tumour susceptibility	Tasmanian devil genetic studies for evolutionary relevance of tumour susceptibility
DPIPWE	Anne-Maree Pearse, Kate Swift	Role of telomeres in DFTD development and progression	Extinction risk & process Rapid evolutionary response
School of Zoology, University of Tasmania			
+collaborators			
UTAS	Menna Jones Shelly Lachish Shannon Troy	Developing non-invasive techniques for survey of threatened carnivores: Tasmanian devils and spotted-tailed quolls	All aspects of monitoring and managing wild devils and quolls (ecosystem impacts)
UTAS; Griffith University	Hamish McCallum	Transmission dynamics and force of infection	Insurance populations Disease suppression Genetic resistance
UTAS	Menna Jones	Devil lineages through time and space & correlates of lineage survival. Changes in genetic mating system. Rapid evolution in devil's response to DFTD, including: Changes in genetic diversity & selective regimes Heredity of traits that confer population resilience.	Insurance populations Disease suppression Genetic resistance Extinction risk & process
University of Queensland; UTAS, Zoology	Shelly Lachish (PhD) Supervisors: Hamish McCallum Menna Jones	Population, demographic & genetic impacts of DFTD. Dispersal patterns of devils. Population modelling to evaluate disease suppression.	Insurance populations Disease suppression
UTAS DPIPWE	Shelly Lachish	Develop population models in RMARK for analyses of long-term monitoring data & disease suppression	
UTAS, Zoology	Rodrigo Hamede (PhD) Supervisors: Menna Jones Hamish McCallum	Social network of contacts & modelling of transmission. Epidemiology at the NW disease front – force of infection .	Insurance populations Disease suppression Genetic resistance
UTAS, Zoology	Nick Beeton (PhD) Supervisor: Hamish McCallum	Modelling DFTD dynamics, spatial spread and management	Insurance populations Disease suppression
UTAS, Zoology	Jim Bashford (Postdoc) Supervisor: Hamish McCallum	Network modelling of wildlife parasites and diseases, including DFTD	Insurance populations Disease suppression
UTAS, Zoology	Tracey Hollings (PhD) Supervisors: Hamish McCallum, Menna Jones	Ecosystem impacts of devil decline.	Ecosystem impacts Non-disease impacts
UTAS, Zoology	Shannon Troy (PhD) Supervisors: Menna Jones, Hamish McCallum, Sarah Munks, Clare Hawkins	Landscape ecology and genetics of spotted-tailed quolls. Habitat occupancy and demographics of devils and quolls at a regional scale, in relation to forestry and farming activities.	Ecosystem impacts Non-disease impacts
UTAS, Zoology	Anne Nielsen (Hons.) Supervisors: Hamish McCallum, Menna Jones, Peter Jarman	Responses of prey species to devil decline	Ecosystem impacts

Washington State University US; UTAS, Zoology; DPIPWE	Andrew Storfer Menna Jones Shelly Lachish Sam Fox	Landscape genetics of devils – devil gene flow and dispersal movements in relation to landscape features that may inform us about barriers.	All four management levers
University of Adelaide, Ancient DNA lab; University of Sydney; UTAS, Zoology; ANU / Sanger Institute Cambridge; DPIPWE Diagnostic Section Devil Program	Jeremy Austin (UAdel) Kathy Belov (USYD) Menna Jones (UTAS, DPIPWE) Chris Burrridge (UTAS) Liz Murchison (ANU+ Cambridge) Anne-Maree Pearse (DPIPWE) Katrina Morris (PhD student USYD) PhD student (UTAS)	Molecular evolution of devils (fossil record through to present) Changes in diversity of neutral (mtDNA, msats) and functional (MHC, C5 inversion) genetic markers.	Insurance populations Genetic resistance Extinction risk & process
UTAS Zoology; Imperial College, London	Christl Donelly Shelly Lachish	Modelling tumour growth; latent period	Insurance populations Disease suppression
UTAS Zoology; University of Utrecht, Theoretical Epidemiology	Hamish McCallum Menna Jones Sylvia Keijser Hilda Brandenburg Hans van Heesterbeek	Modelling devil movements from two scales of trapping data (sites at 25km ² and 150km ²)	Insurance populations Disease suppression
	Our group works in close collaboration with the Devil Program, Threatened Species Section, Kathy Belov, Greg Woods, Anne-Maree Pearse, Jeremy Austin.		
Menzies Research Institute	Greg Woods (Associate Professor)	Immunology of devils & vaccine development	Vaccine Genetic resistance
	Alex Kreiss (Postdoctoral Research Fellow)	Identifying devils that show immune responses to DFTD	Vaccine Genetic resistance
	Cesar Tovar (PhD)	Understanding origin and nature of DFTD	Vaccine Genetic resistance
	Gabriella Brown (PhD)	Can devils immune system kill DFTD tumour cells - Cytotoxic T cell response	Vaccine Genetic resistance
UTAS, ACROSS Centre	Dr Michael Breadmore Dr Robert Shellie Dr Emily Hilder Ms Jessica Gathercole	Metabolomic and proteomic approaches to understand disease and their use in diagnostic testing.	Insurance populations Disease suppression
Faculty of Veterinary Science, University of Sydney	Kathy Belov	Studying the evolution of DFTD in the face of MHC-disparate (or genetically different) hosts. For this I will be studying changes in immune gene expression in DFTD cells, in particular looking for evidence of evolution of immune evasion.	Insurance populations Vaccine Genetic resistance
	Dr Hannah Siddle, NHMRC Postdoctoral Fellow.	Developing immunological reagents to study MHC expression on DFTD cells. She will also develop reagents to characterize T cell subsets.	Vaccine Genetic resistance
	Katrina Morris, PhD Student. Supervisor Kathy Belov, associate	Looking at changes in MHC diversity over time. She is also studying cytokines and immune genes in Tasmanian devils.	Insurance populations Genetic resistance Extinction risk & process

	supervisors Menna Jones and Jeremy Austin		
	Yuanyuan Cheng, PhD Student. Supervisor Kathy Belov, Associate Supervisor Hannah Siddle	Developing MHC-linked microsatellite markers, studying MHC diversity, and characterizing the devil MHC by constructing a contig across the MHC.	
	Our group works in close collaboration with Greg Woods, Menna Jones, Jeremy Austin, Tony Papenfuss, and the Mt Pleasant group		
CCIA / UNSW; Penn State Univ	Vanessa Hayes Stephan Schuster Webb Miller	Devil genome project: Next G sequencing of devil and tumour genome	Insurance populations Vaccine Genetic resistance
CCIA / UNSW; UTAS Zoology; Penn State Univ; Menzies Research Institute	Vanessa Hayes Menna Jones Stephan Schuster Webb Miller Greg Woods	DiversiTyping the devil: development of ultimate SNP array; genotyping of insurance founders; heredity of traits	Insurance populations Genetic resistance
Wellcome Trust Sanger Institute; ANU	Liz Murchison (postdoctoral research fellow)	DFTD cancer genome sequencing. DFTD transcriptome sequencing.	Genetic resistance