**BIOMASS SMOKE IN THE HUMAN ENVIRONMENT WORKSHOP (BISMITHE II)**

**SPEAKER LIST**

| Ms Sarah Balmanno | Manager  
|-------------------|---------  
|                   | Strategic Policy and Programs  
|                   | NSW EPA  |

| Ms Rose Bell  
|-----------------|------------------------------------------  
| Research, Information and Evaluation Coordinator  
| Asthma Australia  
| Rose Bell is the Research, Information and Evaluation Coordinator at Asthma Australia. She holds a Bachelor of Public Health and Health Promotion. Rose began at Asthma Australia in 2017 to implement community education sessions across Victoria following the 2016 Epidemic Thunderstorm Asthma event in Melbourne. In her current role, Rose coordinates Asthma Australia National Research Program and other research activities, supports internal program evaluations and contributes to the advocacy strategies of the organisation. Rose is passionate about public health and programs which seek to address root causes of health and inequality.  |

| Dr Angie Bone  
|-----------------|------------------------------------------  
| Acting Chief Health Officer  
| Department of Health and Human Services  
| Dr Angie Bone has extensive experience and clinical expertise in public health. She is a medical doctor with experience in health protection related to environmental hazards and infectious diseases in the UK and a number of other countries. Dr Bone has a keen interest in the social and environmental determinants of health, particularly climate change extreme weather events, housing and urban planning, and infectious diseases.  

Dr Bone is a Fellow of the Faculty of Public Health (UK), a Member of the Royal College of Physicians (UK) and Associate Clinical Professor at the University of Exeter (UK). She holds numerous qualifications in Public Health and Tropical Medicine.  |
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<th><strong>Dr Martin Cope</strong></th>
<th>Martin has worked in the area of air quality modelling and applications for over 30 years. He has been employed by CSIRO as a Principal Research Scientist for more than 20 years and over this period has contributed to air quality science in Australia. His principal area of research has been into the development of models which describe the sources and formation of biogenic and anthropogenic secondary gases and aerosols in the Australian atmosphere.</th>
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<td><strong>Dr Maximilien Desservettaz</strong></td>
<td>Max Desservettaz has a B.Sc. and M.Chem from the University of Leeds (UK), and Ph.D. in Chemistry from The University of Wollongong. His thesis focussed on better characterising Australian biomass burning emissions. He studied smoke composition on Hazard Reduction Burns in Victoria, at the CSIRO Pyrotron in Canberra and at Australia’s largest ever smoke sampling field campaign at the Northern Territory Baseline Air Pollution Station (NT BAPS) - Gunn Point. He currently works for both CSIRO climate science centre, analysing the impact of hydraulic fracturing coal seam gas extraction on air quality, and the University of Wollongong, studying the relative impact of domestic wood heating and hazard reduction burns on Sydney’s air quality.</td>
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| **Mr Maheshinderjeet Garg** | PhD Candidate
University of Melbourne |
| **Ms Wendy Grenville** | Manager Policy and Intelligence
Security & Emergency Management Division
Department of Education & Training, Victoria |
| **Ms Liz Hamilton** | Knowledge Broker Seasonal Risk
Biosecurity and Agriculture Services
Department of Jobs, Precincts and Regions, Victoria |
| **Dr Ivan Hanigan** | Research Fellow
School of Medicine
The University of Sydney |
Dr. Henderson, as the senior environmental health scientist at BCCDC, leads a program of applied research and surveillance to support evidence-based policy for the province. This role requires her to be a generalist rather than a specialist, and her work spans a wide range of topics, including air pollution from all provincially relevant sources (wildfire smoke, residential woodsmoke, industry, road dust, shipping and vehicles), extreme weather events, radon gas, food safety, water quality and exposures managed by the Drug and Poison Information Centre (DPIC).

Most of her work requires the collection, processing, integration, analysis and visualization of large health and environmental datasets. Her team works exclusively with the computing environment R, and takes a leadership role in R training across BCCDC and UBC.

Sarah Henderson started her career as an environmental engineer (BASc, UBC, 2000), working on pollution abatement and control. She switched her focus to environmental epidemiology (PhD, UBC, 2009) when she first became interested in the public health consequences of engineering decisions.

Sarah joined the BCCDC in 2010. She enjoys the challenge and diversity of work in environmental public health, and is constantly inspired by the dedication of her colleagues.
Dr John Innis
EPA Tasmania

John Innis has a B.Ed.(Sci.) from Melbourne State College, and a B.Sc.(Hons) and Ph.D. in Physics from Monash University. He was a post-doctoral fellow working in astrophysics at the University of Birmingham, UK from 1987 to 1992. He then joined the Australian Antarctic Division, conducting upper atmosphere studies over winter at both Mawson and Davis stations. He was a visiting scholar at the University of Alaska Fairbanks, from 2001 to 2002, before returning to the AAD to the atmospheric lidar project. He commenced his current position at EPA Tasmania in 2007, and co-ordinates Tasmania’s ambient air monitoring programmes. He is best known for giving long and tedious talks about BLANKET with far too many graphs.

Associate Professor Fay Johnston
Associate Professor
Public Health and Primary Care Theme
Menzies Institute for Medical Research
University of Tasmania

A/Prof Fay Johnston is a medical doctor and epidemiologist who heads the Environmental Health research group at the Menzies Institute for Medical Research, University of Tasmania.

Fay is internationally recognised for her expertise in the health impacts of environmental hazards, especially outdoor smoke from bushfires, prescribed burns and solid fuels and has been active in this research area for around 20 years.

In 2016 she led the development a new pollen, smoke and health monitoring system, AirRater, which has won multiple awards for innovation and is now used in several states of Australia and she leads the long term follow up study of infants who were exposed to a severe pollution episode from a coal mine fire in 2014, as part of the Hazelwood Health Study.

A/Prof Johnston holds a concurrent appointment as a Specialist Medical Advisor in Public Health for the Tasmanian Department of Health.

More information and registration at www.casanz.org.au
Ms Ruby Kan
Principal Scientist
Atmospheric Research
Office of Environment & Heritage, NSW

Ruby Kan is the Principal Scientist in Atmospheric Research of Climate and Atmospheric Science branch at the New South Wales Office of Environment and Heritage. Her role includes influencing the strategic direction of climate and atmospheric science priorities and provision of scientific research to deliver improved policy and health outcome for NSW. Ruby has previously worked in NSW Environment Protection Authority and environmental consulting focusing on air quality regulation, emission inventories, environmental assessment of industrial facilities and air quality monitoring.

Mr Peter Lahm
Air Resources Specialist
US Forest Service
Fire & Aviation Management, USA

Dr Ian Longley
Air Quality Scientist
Programme Leader – Atmospheric Environment, Health and Society
NIWA

Programme leader for Impacts of Air Pollutants research programme for New Zealand.

He has a degree in Engineering and a PhD in Atmospheric Physics, both from the University of Manchester. He joined NIWA in 2007.

Ian's research mission is to apply the latest scientific understanding to the practical management of air quality, whilst expanding our understanding of the relationships between emissions and health. His principle expertise lies in observationally-based studies of the impacts of exposure to road traffic emissions, however the programme he leads spans research into domestic heating, urban meteorology, atmospheric composition, indoor air, urban planning, environmental information and citizen participation.

Ian regularly acts as a consultant to Auckland Council, the Ministry for the Environment, the New Zealand Transport Agency and the infrastructure industry, and is currently advising the New South Wales Government regarding road tunnels. Ian has published over 50 scientific papers and reports and given presentations at conferences and meetings around the world.
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<th>Name</th>
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<td>Mr Chris Lucani</td>
<td>Postgraduate, University of Tasmania</td>
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<td>Mr Angus MacNeil</td>
<td>Business Manager (and Coordinated Smoke Management Systems Manager)</td>
<td>Angus has an honours degree in Marine Biology from the Heriot-Watt University in Edinburgh. He currently works as Business Manager for the Forest Practices Authority (FPA), which is responsible for regulating forest practices and the clearing of threatened native vegetation in Tasmania and was its Chief Forest Practices Officer (or CEO) from Feb 2015 to Apr 2016. Prior to that he was Business Manager for Forestry Tasmania’s Division of Forest Research and Development. Angus has been involved with the development and management of the Tasmanian Coordinated Smoke Management System (CSMS) since 2009, which aims to reduce the risk of smoke from planned vegetation burn-offs affecting populated areas. He chairs twice-yearly meetings of the CSMS Working Group, consisting of entities undertaking prescribed burns along with representatives of government involved in overseeing the System. He manages the CSMS website used by operators to enter daily burn ‘bids’ and which subsequently calculates their burn allocations after reference to customised daily weather forecasts provided by the Bureau of Meteorology. He works closely with the Tasmanian EPA, and with forest industry, local councils, the Tasmania Fire Service and Parks and Wildlife Service to continually refine the CSMS.</td>
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<td>Ms Sally MacPhail</td>
<td>Team Leader</td>
<td>Team Leader, Target Audience Strategy, Strategic Communications Unit, EPA Victoria</td>
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Mr Leon Majewski

Team Leader, Satellite Applications Team
Bureau of Meteorology

I lead a team responsible for the development of new/improved satellite data products and the associated data processing systems. Satellite data products are used extensively by the public, industry, forecasters, numerical weather prediction models, ocean prediction models and researchers across weather, climate and the environment.

Our recent focus has been on the transition to the new generation of geostationary imagers. These new sensors, such as the Advanced Himawari Imager, have much greater capability than previous generation (e.g. MTSAT, GMS), providing imagery with improved spectral, spatial and temporal resolution.

Our team is involved in a number of internal and external projects. These include the Himawari Project, the Weather, Climate and Environmental Applications from Geostationary and Low-Earth Orbit Satellites Project, the Thunderstorm Asthma Project, and the High Ice Water Crystals Project. Our team also contributes to the Integrated Marine Observing System and the Terrestrial Ecosystem Research Network.

Mr Laurence McCoy

Supervisor, Bush Fire Analyst
Operational Services/Planning and Predictive Services
NSW Rural Fire Service

Laurence McCoy is a Senior Fire Behaviour Analyst with the NSW Rural Fire Service. In 2010, Laurence was seconded to NSW RFS Headquarters to project manage the establishment of a Fire Behaviour Analysis and Smoke Modelling capabilities with the NSW RFS and continues to work as a Supervisor in the NSW RFS Predictive Services Unit. Laurence holds a Degree in Applied Science majoring in Geography with Hons, an Advanced Diploma of Leadership and Management in addition to numerous Fire Fighting, training and Bush Regeneration certificates.

Mr Darrin McKenzie

Deputy Chief Fire Officer
Department of Environment, Land, Water and Planning, Victoria
| Mr Bruce Mogg | Bruce has been in the wood heating industry for over 35 years as a retailer, manufacturer and administrator having spent 10 years as National Chairman of the AHHA and another 2 years as its General Manager. Over that time, he has been involved in the Standards Committees that produce the 3 important Standards that define the best practice procedures for our industry and dealt with all levels of government from Federal Ministers to working with local Councils on smoke reduction programs. Bruce is looking forward to providing a suitable insight into wood heating from the industry’s point of view at BISMITHE II. |
| Mr Geoff Morris | Senior Program Manager  
Country Fire Authority, Victoria |
| Professor Ian Porter | Research Professor  
Animal Plant & Soil Sciences  
Latrobe University |
| Professor Brad Prezant | Chief Scientific Officer  
VA Sciences |
| Dr Owen Price | Senior Research Fellow  
Centre for Environmental Risk Management of Bushfire  
University of Wollongong  
30 years as a research scientist, mostly in conservation biology and bushfire risk. Projects included regional conservation planning, movement patterns and resource use by frugivorous birds, impacts of habitat fragmentation, population modelling, spatial fire simulation modelling, statistical and spatial analysis of aspects of fire behaviour, fire risk and risk reduction strategies. Approximately 120 publications in total, of which 30 are first authorship in international journals. |
| Dr Fabienne Reisen | Team Leader | Principal Research Scientist  
Oceans & Atmosphere | Climate Science Centre  
CSIRO  
Dr Fabienne Reisen is a principal atmospheric research scientist in the Climate Science Centre of CSIRO Oceans and Atmosphere with a strong research expertise in atmospheric and analytical chemistry, ambient air quality measurements of gases and particles, and personal and population exposures to toxic hazards. Her primary research focus is on biomass burning emissions and improving our |

More information and registration at www.casanz.org.au
**Dr Fabienne Reisen**

continued

understanding of the chemical composition of smoke plumes and how these impact air quality and public health.

Over the last 14 years, Fabienne has successfully led a number of co-investment projects addressing the issue of population exposures to toxics air contaminants and significantly contributed to research projects assessing the impact from prescribed burns, bushfires and domestic wood heating on regional air quality.

**Dr Dorothy L. Robinson**

Deputy Mayor
Armidale Regional Council

**Ms Stephanie Samson**

Research Assistant
NSW Bushfire Risk Management Research Hub
University of Wollongong

**Dr Yvonne Scorgie**

Senior Team Leader, Climate and Atmospheric Science
Office of Environment and Heritage, NSW

Yvonne Scorgie holds an MSc and PhD in atmospheric science and has experience in air emission inventory, meteorology, regional air quality modelling and exposure and health risk assessment.

She worked as an environmental consultant for 17 years before joining NSW Government five years ago. In her substantive role, Yvonne is a Senior Team Leader in the Climate and Atmospheric Science Branch of the NSW Department of Planning, Industry and Environment.

Yvonne and her team are currently delivering the Enhancing Air Quality Forecasting in NSW program which includes expanding the scope and accuracy of smoke forecasting to support HR smoke management and help NSW communities manage their exposure.

**Dr Paul Torre**

Senior Applied Scientist Air & Odour
Environmental Solutions Unit
Environmental Protection Authority Victoria

Paul Torre is the Senior Applied Scientist Air & Odour in the Air Noise Odour Team in EPA Victoria and current EPA Principal Expert – Air Quality. Paul has developed specialist knowledge of air pollution science, gained extensive experience in measuring and assessing air quality impacts and managing air quality assessment programs spanning over 30 years. During this period, he has led numerous air quality monitoring and assessment programs for common and

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Dr Paul Torre continued

hazardous air pollutants including smoke impacts from bushfire, planned burning and wood heaters.

In his current role in EPA he provides technical and scientific advice for regulatory compliance and enforcement, informing policy and strategy development on air quality and air pollution issues He is active in CASANZ as current Victoria/Tasmania Branch President and spends too much time tracking air pollution plumes.

Mr Mark Upton

Team Leader Environmental Health and Municipal Recovery Manager
Mornington Peninsular Shire, Victoria

Dr Amanda Wheeler

Senior Research Fellow
Behaviour, Environment and Cognition Research Program
Mary MacKillop Institute for Health Research
Australian Catholic University

Dr Amanda Wheeler is a Senior Research Fellow in the Behaviour, Environment and Cognition Research program based at the Mary MacKillop Institute for Health Research, Australian Catholic University. She is part of the team investigating the effects of the built environment, air pollution and noise on the cognitive health of older adults. Her other research interests include evaluating interventions to improve indoor air quality that is impacted by biomass smoke. Her published research interests include personal exposures to air pollution from residential and ambient sources, tracking activity patterns, and understanding the intra-urban variability of air pollutants using GIS tools and developing Land Use Regression (LUR) models. She has experience with a range of environmental pollutants including particulate matter, volatile organic compounds, phthalates and polycyclic aromatic hydrocarbons. She is also an Honorary Fellow at the University of Tasmania and The University of Melbourne.

Dr Grant Williamson

Postdoctoral Fellow
University of Tasmania

Grant completed his doctorate at the University of Adelaide, studying the impact of fine-scaled rainfall regime across a climate gradient on adaption in native Australian grasses. He took up a post-doctoral position at Charles Darwin University in an ARC-linkage project studying the impact of mosquito control measures on mosquito-borne disease on humans, and the ecology of the mangrove swamps in which they breed.
Grant moved to the University of Tasmania in 2008 and took up a post-doctoral position on the ARC-linkage Biomass Smoke Project, continuing his interest in the nexus between human health and ecology, studying the impact of smoke pollution from landscape fire on human health, and developing predictive models for smoke exposure.

During his career at the University of Tasmania, Grant was part of the NERP Landscapes and Policy hub, researching landscape-scale human-ecological interactions in the Australian Alps and Tasmanian Midlands.

Grant received a post-doctoral scholarship from the Centre for Air Quality & Health Research and Evaluation at the University of Sydney in 2014 to continue his work studying human exposure to smoke pollution from landscape fires, and now a research fellow working with the NSW Advanced Bushfire Research Hub, developing modelling tools to understand fire history, and how Australian fire regimes and vegetation will shift under climate change.

Emily has been involved in the management of wood smoke dominated airsheds in New Zealand for over 20 years. Specialist expertise includes wood burner testing (including real life testing programmes), emissions inventories, projections modelling, fuel poverty and cold homes evaluations, health impact assessments, designing incentives programmes, developing educational material, behaviour change and burner operation and technology evaluations. Emily has prepared scientific material and expert evidence to support the implementation of regulatory methods for many Councils throughout New Zealand to manage urban air quality in wood smoke dominated areas.

She has observed areas where these measures have been effective and others where they have been less effective and has developed insight into what creates a successful regime in terms of science, implementation and the community.

Key areas of wood smoke expertise include:

- Wood burner emissions – expertise in assessing emissions from wood burners, open fires, multi fuel burners, pellet fires including factors influencing emissions.
- Improving wood smoke environments – scientific evaluations underpinning successful management of wood smoke (domestic heating) related airsheds.
• Incentives programmes for burner swap outs – guidance on how to design and implement a programme.

• Drivers of wood burning behaviours, gross emitters and behaviour change.

• Wood burners and cold homes – impacts of regulations on fuel poverty/ health impact assessments.

• Wood burner tests – real life and laboratory simulations including method and issues.

• Wood smoke from outdoor burning – residential and rural burning of garden and tree waste.

• Health impacts – health impacts of particulate pollution including acute and chronic impacts and relative significance of different size fractions.

• Future issues – small section sizes/ townhouses/ your smoke/ my home – penetration of single storey smoke emissions to neighbouring two story dwellings.

• Knowledge of the extent and causes of air quality issues as well as operative, proposed and draft air plans in many urban areas of New Zealand.