

## **GAYAN MADURANGA BANDARA BOWATTE**

National Institute of Fundamental Studies, Kandy,  
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### **Research and Professional Experience**

- 2018 – Current** Research fellow at National Institute of Fundamental Studies, Kandy, Sri Lanka
- 2016-2018** Post-doctoral research fellow at School of Population and Global Health, Faculty of Medicine Dentistry and Health Sciences, The University of Melbourne, Australia
- 2017 – 2018** Managing Tasmanian Longitudinal Health Study (TAHS) - World's longest running respiratory cohort study, Melbourne School of Population and Global Health, Faculty of Medicine Dentistry and Health Sciences, The University of Melbourne, Australia
- 2013 - 2016** PhD candidate at School of Population and Global Health, Faculty of Medicine Dentistry and Health Sciences, The University of Melbourne, Australia **Research project:** Impact of traffic related air pollution on asthma, allergic diseases and lung function
- 2012 – 2013** Research Assistant, TAHS, Melbourne School of Population and Global Health, Faculty of Medicine Dentistry and Health Sciences, The University of Melbourne, Australia
- 2010 – 2012** Research Assistant at Department of Zoology, Faculty of Science, University of Peradeniya, Sri Lanka
- 2010** Demonstrator, Post Graduate Institute of Science, University of Peradeniya, Sri Lanka
- 2009 – 2010** Demonstrator, Department of Zoology, Faculty of Science, University of Peradeniya, Sri Lanka

### **Academic Qualifications**

- 2013 - 2016** PhD at Melbourne School of Population and Global Health, Faculty of Medicine Dentistry and Health Sciences, The University of Melbourne, Australia.
- 2005 – 2009** Bachelor of Science (Hons) Specialized in Zoology (with Second Class Upper Division), University of Peradeniya, Sri Lanka.

## **Research Publications in Scholarly Journals**

### **Peer-reviewed Manuscripts**

1. Yang B-Y, Bloom M, Markevych I, Qian Z, Vaughn M, Cummings Vaughn L, Li S, Chen G, **Bowatte G**, Perret J, Dharmage S, Heinrich J, Yim S, Lin S, Tian L, Yang M, Liu K-K, Zeng X-W, Hu L-W, Guo Y, Dong G-H. Exposure to ambient air pollution and blood lipids in adults: The 33 Communities Chinese Health Study. *Environment international*. 2018;119:485-92.
2. Dai X, **Bowatte G**, Lowe A, Matheson M, Gurrin L, Burgess J, Dharmage S, Lodge C. Do Glutathione S-Transferase Genes Modify the Link between Indoor Air Pollution and Asthma, Allergies, and Lung Function? A Systematic Review. *Current Allergy and Asthma Reports*. 2018;18(3):20.
3. Bui D, Walters H, Burgess J, Perret J, Bui M, **Bowatte G**, Lowe A, Russell M, Thompson B, Hamilton G, James A, Giles G, Thomas P, Jarvis D, Svanes C, Garcia Aymerich J, Erbas B, Frith P, Allen K, Abramson M, Lodge C, Dharmage S. Childhood Respiratory Risk Factor Profiles, Their Interactions and Mediators, and Middle-age Lung Function: A Prospective Cohort Study from the 1st to 6th Decade. *Annals of the American Thoracic Society*. 2018.
4. Bui D, Lodge C, Burgess J, Lowe A, Perret J, Bui M, **Bowatte G**, Gurrin L, Johns D, Thompson B, Hamilton G, Frith P, James A, Thomas P, Jarvis D, Svanes C, Russell M, Morrison S, Feather I, Allen K, Wood Baker R, Hopper J, Giles G, Abramson M, Walters E, Matheson M, Dharmage S. Childhood predictors of lung function trajectories and future COPD risk: a prospective cohort study from the first to the sixth decade of life. *The Lancet Respiratory Medicine*. 2018;6(7):535-44.
5. **Bowatte G**, Tham R, Perret J, Bloom M, Dong G, Waidyatillake N, Bui D, Morgan G, Jalaludin B, Lodge C, Dharmage S. Air Pollution and Otitis Media in Children: A Systematic Review of Literature. *International Journal of Environmental Research and Public Health*. 2018;15(2):257.
6. **Bowatte G**, Lodge C, Knibbs L, Erbas B, Perret J, Jalaludin B, Morgan G, Bui D, Giles G, Hamilton G, Wood Baker R, Thomas P, Thompson B, Matheson M, Abramson M, Walters EH, Dharmage S. Traffic related air pollution and development and persistence of asthma and low lung function. *Environment international*. 2018;113:170-6.
7. Waidyatillake NT, Dharmage SC, Allen KJ, **Bowatte G**, Boyle RJ, Burgess JA, Koplin JJ, Garcia Larsen V, Lowe AJ, Lodge CJ. Association between the age of solid food introduction and eczema: A systematic review and a meta-analysis. *Clinical & Experimental Allergy* 2018.
8. **Bowatte G**, Markevych I, Standl M, Dharmage SC, Koletzko S, Lehmann I, Bauer CP, Schikowski T, von Berg A, Berdel D, Heinrich J. Hygienic behavior and allergic sensitization in German adolescents. *Allergy* 2018 (Copenhagen).
9. Dai X, Dharmage S, **Bowatte G**, Waidyatillake N, Perret J, Hui J, Erbas B, Abramson M, Lowe A, Burgess J, Svanes C, Lodge C. Interaction of glutathione s-transferase m1, t1

and p1 genes with early life tobacco smoke exposure on lung function in adolescents. *Chest*. 2018 (Accepted)

10. Fuertes E, Markevych I, Jarvis D, Vienneau D, de H, K., Antó J, **Bowatte G**, Bono R, Corsico A, Emtner M, Gislason T, Gullón J, Heinrich J, Henderson J, Holm M, Johannessen A, Leynaert B, Marcon A, Marchetti P, Moratalla J, Pascual S, Probst-Hensch N, Sánchez-Ramos J, Siroux V, Sommar J, Weyler J, Kuenzli N, Jacquemin B, Garcia-Aymerich J. Physical activity is positively associated with lung function regardless of residential air pollution concentrations: the ECRHS cohort. *Environmental International*. 2018. (Accepted)
11. **Bowatte G**, Matheson M, Perret J, Lowe A, Senaratne C, Hall G, de Klerk N, Keogh L, McDonald C, Waidyatillake NT, Sly P, Jarvis D, Abramson MJ, Lodge C, Dharmage SC. Prediction models for the development of COPD: a systematic review. *International Journal of COPD*. 2018.
12. **Bowatte G**, Lodge CJ, Knibbs LD, Erbas B, Perret J, Jalaludin B, Morgan G, Bui DS, Giles GG, Hamilton GS, Wood- Baker R, Thomas P, Thompson BR, Matheson MC, Abramson MJ, Walters EH, Dharmage SC. Traffic related air pollution and development and persistence of asthma and low lung function. *Environmental International*. 2018;113:170-6.
13. Zeng XW, Qian ZM, Vaughn MG, Nelson EJ, Dharmage SC, **Bowatte G**, Perret J, Chen DH, Ma H, Lin S, de Foy B, Hu LW, Yang BY, Xu SL, Zhang C, Tian YP, Nian M, Wang J, Xiao X, Bao WW, Zhang YZ, Dong GH. Positive association between short-term ambient air pollution exposure and children blood pressure in China-Result from the Seven Northeast Cities (SNEC) study. *Environmental pollution*. 2017;224:698-705.
14. Waidyatillake NT, Dharmage SC, Allen KJ, Lodge CJ, Simpson JA, **Bowatte G**, Abramson MJ, Lowe AJ. Association of breast milk fatty acids with allergic disease outcomes-A systematic review. *Allergy*. 2017.
15. Perret JL, **Bowatte G**, Lodge CJ, Knibbs LD, Gurrin LC, Kandane-Rathnayake R, Johns DP, Lowe AJ, Burgess JA, Thompson BR, Thomas PS, Wood-Baker R, Morrison S, Giles GG, Marks G, Markos J, Tang MLK, Abramson MJ, Walters EH, Matheson MC, Dharmage SC. The Dose-Response Association between Nitrogen Dioxide Exposure and Serum Interleukin-6 Concentrations. *International journal of molecular sciences*. 2017;18(5).
16. Lambert KA, **Bowatte G**, Tham R, Lodge C, Prendergast L, Heinrich J, Abramson MJ, Dharmage SC, Erbas B. Residential greenness and allergic respiratory diseases in children and adolescents - A systematic review and meta-analysis. *Environmental research*. 2017;159:212-21.
17. **Bowatte G**, Erbas B, Lodge CJ, Knibbs LD, Gurrin LC, Marks GB, Thomas PS, Johns DP, Giles GG, Hui J, Dennekamp M, Perret JL, Abramson MJ, Walters EH, Matheson MC, Dharmage SC. Traffic-related air pollution exposure over a 5-year period is associated with increased risk of asthma and poor lung function in middle age. *European Respiratory Journal*. 2017;50(4).

18. Tham R, Katelaris CH, Vicendese D, Dharmage SC, Lowe AJ, **Bowatte G**, Taylor P, Burton P, Abramson MJ, Erbas B. The role of outdoor fungi on asthma hospital admissions in children and adolescents: A 5-year time stratified case-crossover analysis. *Environmental research*. 2016;154:42-9.
19. Lodge CJ, **Bowatte G**, Matheson MC, Dharmage SC. The Role of Breastfeeding in Childhood Otitis Media. *Current allergy and asthma reports*. 2016;16(9):68.
20. Fuertes E, Markevych I, **Bowatte G**, Gruziova O, Gehring U, Becker A, Berdel D, von Berg A, Bergstrom A, Brauer M, Brunekreef B, Bruske I, Carlsten C, Chan-Yeung M, Dharmage SC, Hoffmann B, Klumper C, Koppelman GH, Kozyrskyj A, Korek M, Kull I, Lodge C, Lowe A, MacIntyre E, Pershagen G, Standl M, Sugiri D, Wijga A, Heinrich J. Residential greenness is differentially associated with childhood allergic rhinitis and aeroallergen sensitization in seven birth cohorts. *Allergy*. 2016;71(10):1461-71.
21. **Bowatte G**, Lodge CJ, Perret JL, Matheson MC, Dharmage SC. Interactions of GST Polymorphisms in Air Pollution Exposure and Respiratory Diseases and Allergies. *Current allergy and asthma reports*. 2016;16(12):85.
22. **Bowatte G**, Lodge CJ, Lowe AJ, Erbas B, Dennekamp M, Marks GB, Perret J, Hui J, Wjst M, Gurrin LC, Allen KJ, Abramson MJ, Matheson MC, Dharmage SC. Do Variants in GSTs Modify the Association between Traffic Air Pollution and Asthma in Adolescence? *International journal of molecular sciences*. 2016;17(4):485.
23. **Bowatte G**, Lodge CJ, Knibbs LD, Lowe AJ, Erbas B, Dennekamp M, Marks GB, Giles G, Morrison S, Thompson B, Thomas PS, Hui J, Perret JL, Abramson MJ, Walters H, Matheson MC, Dharmage SC. Traffic-related air pollution exposure is associated with allergic sensitization, asthma, and poor lung function in middle age. *The Journal of allergy and clinical immunology*. 2016.
24. Alif SM, Dharmage SC, **Bowatte G**, Karahalios A, Benke G, Dennekamp M, Mehta AJ, Miedinger D, Kunzli N, Probst-Hensch N, Matheson MC. Occupational exposure and risk of chronic obstructive pulmonary disease: a systematic review and meta-analysis. *Expert review of respiratory medicine*. 2016;10(8):861-72.
25. Tham R, **Bowatte G**, Dharmage SC, Tan DJ, Lau MX, Dai X, Allen KJ, Lodge CJ. Breastfeeding and the risk of dental caries: a systematic review and meta-analysis. *Acta Paediatrica*. 2015;104(467):62-84.
26. Somaweera R, Wijayathilaka N, **Bowatte G**, Meegaskumbura M. Conservation in a changing landscape: habitat occupancy of the critically endangered Tennent's leaf-nosed lizard (*Ceratophora tennentii*) in Sri Lanka. *Journal of Natural History*. 2015;49(31-32):1961-85.
27. Lodge CJ, Tan DJ, Lau MX, Dai X, Tham R, Lowe AJ, **Bowatte G**, Allen KJ, Dharmage SC. Breastfeeding and asthma and allergies: a systematic review and meta-analysis. *Acta Paediatrica*. 2015;104(467):38-53.
28. **Bowatte G**, Tham R, Allen KJ, Tan DJ, Lau M, Dai X, Lodge CJ. Breastfeeding and childhood acute otitis media: a systematic review and meta-analysis. *Acta Paediatrica*. 2015;104(467):85-95.

29. **Bowatte G**, Lodge CJ, Lowe AJ, Erbas B, Perret J, Abramson MJ, Matheson MC, Dharmage SC. The influence of childhood traffic-related air pollution exposure on asthma, allergy and sensitization: Reply to PMID 25495759. *Allergy*. 2015;70(10):1352.
30. **Bowatte G**, Lodge C, Lowe AJ, Erbas B, Perret J, Abramson MJ, Matheson M, Dharmage SC. The influence of childhood traffic-related air pollution exposure on asthma, allergy and sensitization: a systematic review and a meta-analysis of birth cohort studies. *Allergy*. 2015;70(3):245-56.
31. **Bowatte G**, Perera P, Senevirathne G, Meegaskumbura S, Meegaskumbura M. Tadpoles as dengue mosquito (*Aedes aegypti*) egg predators. *Biological Control*. 2013;67(3):469-74.
32. Somaweera R, Wijethilake N, **Bowatte G**. Does the invasive shrub *Ulex Europaeus* benefit an endemic Sri Lankan lizard? *Herpetological Conservation and Biology* 2012;7(2):219-26.
33. Meegaskumbura M, Manamendra-Arachchi K, **Bowatte G**, Meegaskumbura S. Rediscovery of *Pseudophilautus semiruber*, a diminutive shrub frog (Rhacophoridae: Pseudophilautus) from Sri Lanka. *Zootaxa*. 2012;3229:58-68.
34. **Bowatte G**, Meegaskumbura M. Morphology and ecology of tadpoles of *Ramanella obscura* (Anura: Microhylidae). *Ceylon Journal of Science*. 2012;40(2):109-20.
35. Meegaskumbura M, Meegaskumbura S, **Bowatte G**, Manamendra Arachchi K, Pethiyagoda R, Hanken J, Schneider C. *Taruga* (Anura: Rhacophoridae), a new genus of foam-nesting tree frogs endemic to Sri Lanka. *Ceylon Journal of Science*. 2011;39(2):75-94.
36. **Bowatte G**, Meegaskumbura M. Morphology and ecology of *Microhyla rubra* (Anura: Microhylidae) tadpoles from Sri Lanka. *Amphibian & Reptile Conservation*. 2011;5(2):22-32.
37. Ariyasiri K, Ariyasiri K, **Bowatte G**, Menike U, Meegaskumbura S, Meegaskumbura M. Predator-induced plasticity in tadpoles of *Polypedates cruciger* (Anura: Rhacophoridae). *Amphibian & Reptile Conservation*. 2011;5(2):14-21.

## **Abstracts and Proceedings of Conferences**

1. Lai V, **Bowatte G**, Knibbs L, Rangamuwa K, Young A, Dharmage S, Thien F. Residential NO<sub>2</sub> exposure is associated with recent urgent healthcare utilisation in current asthmatics admitted to eastern health during a thunderstorm asthma epidemic. Thoracic Society of Australia and New Zealand conference 2018, Adelaide, Australia.
2. Bui D, Walters H, Burgess J, Perret J, Bui M, **Bowatte G**, Lowe A, Russell M, Thompson B, Hamilton G, James A, Giles G, Thomas P, Jarvis D, Svanes C, Garcia Aymerich J, Erbas B, Frith P, Allen K, Abramson M, Lodge C, Dharmage S. Middle-age lung function decline is predominantly influenced by adult factors and their interactions with childhood and genetic factors. Thoracic Society of Australia and New Zealand conference 2018, Adelaide, Australia.
3. Harun NS, Lachapelle P, **Bowatte G**, Lodge C, Hinks TS, Irving LB, Dharmage SC, Douglass JA. The royal Melbourne hospital thunderstorm-asthma cohort. Thoracic Society of Australia and New Zealand conference 2018, Adelaide, Australia.

4. Perret JL, **Bowatte G**, Lodge CJ, Knibbs LD, Lowe AJ, Giles GG, Morrison S, Abramson MJ, Walters EH, Dharmage SC. Nitrogen dioxide is adversely associated with transfer factor of carbon monoxide in a dose-response manner. Thoracic Society of Australia and New Zealand conference 2018, Adelaide, Australia.
5. **Bowatte G**, Lodge Knibb L, Lowe A, Erbas B, Dennekamp M, Perret J, Giles G, Jalaludin B, Morgan G, Marks G, Abramson M, Walters H, Dharmage S. Effects of TRAP exposure on development and persistence of asthma and low lung function in middle age adults. European Respiratory Society Congress. 2017, Milan, Italy.
6. **Bowatte G**, Matheson M, Perret J, Lowe A, Senaratna C, Hall GL, Sly PD, de Klerk N, McDonald CF, Abramson MJ, Lodge C, Dharmage SC. Effects of Prediction models for the development of COPD: a systematic review. European Respiratory Society Congress. 2017, Milan, Italy.
7. **Bowatte G**, Lodge Knibb L, Lowe A, Erbas B, Dennekamp M, Perret J, Giles G, Jalaludin B, Morgan G, Marks G, Abramson M, Walters H, Dharmage S. Effects of TRAP exposure on development and persistence of asthma and low lung function in middle age adults. International Society for Environmental Epidemiology (ISEE) conference 2017, Sydney 2017.
8. Fuertes E, Markevych I, Antó J, **Bowatte G**, Bono R, Emtner M, Gislason T, Heinrich J, Henderson J, Jacquemin B, Jarvis D, Johannessen A, Leynaert B, Marcon A, Pascual S, Sommar J, Garcia-Aymerich J. Residential PM2.5 mass and greenness modify the association between physical activity and lung function. European Respiratory Society Congress. 2017, Milan, Italy.
9. Lambert KA, **Bowatte G**, Tham R, Lodge C, Prendergast LA, Heinrich J, Abramson MJ, Dharmage SC, Erbas B. Residential greenness and allergic disease in children and adolescents - Results of a systematic review and meta-analysis. European Academy of Allergy and Clinical Immunology (EAACI) conference, Finland 2017.
10. Bui D, Lodge C, Burgess J, Perret J, Lowe A, **Bowatte G**, Abramson MJ, Thompson BR, Hamilton GS, Frith P, Giles G, James A, Jarvis D, Walters EH, Dharmage S. Childhood respiratory risk factor profiles and lung function in middle age. European Respiratory Society Congress. 2017, Milan, Italy.
11. Bui D, Burgess J, Lodge C, Lowe A, Perret J, **Bowatte G**, Thompson B, Hamilton G, Frith P, James A, Johns D, Thomas P, Jarvis D, Svanes C, Morrison S, Feather I, Allen I, Bui M, Russell M, Abramson M, Walters H, Matheson M, Dharmage S. Lung function trajectories over the life span, their associated childhood factors and consequences. European Respiratory Society Congress. 2017, Milan, Italy.
12. **Bowatte G**, Erbas B, Lodge CJ, Knibbs LD, Gurrin LC, Marks GB, Thomas PS, Johns DP, Giles GG, Hui J, Dennekamp M, Perret J, Abramson MJ, Walters EH, Matheson MC, Dharmage SC. The association of long-term traffic-related air pollution exposure with asthma and poor lung function in middle age. Thoracic Society of Australia and New Zealand conference 2017, Canberra, Australia.
13. Senaratna C, Lowe A, Perret J, Abramson M, Lodge C, Burgess J, **Bowatte G**, Erbas B, Frith P, Giles G, Walters H, Hamilton G, Dharmage S. Diagnostic utility of STOP-Bang and Berlin questionnaires for middle-aged Australians. Australasian Sleep Association Congress 2017, Auckland, New Zealand.
14. Campbell B, Perret J, Lodge C, Simpson J, Lowe A, Burgess J, **Bowatte G**, Bui D, Thomas P, Leynaert B, Gómez Real F, Matheson M, Thompson B, Abramson M, Walters EH, Dharmage SC. Thoracic Society of Australia and New Zealand conference 2017, Canberra, Australia.

15. Bui DS, Burgess JA, Lodge C L, Bui M, Lowe A, **Bowatte G**, Abramson MJ, Katie J.Allen, Walters EH, Matheson MC, Dharmage SC. Lung function trajectories over the life span, their associated childhood factors and consequences: a population based longitudinal cohort. Thoracic Society of Australia and New Zealand conference 2017, Canberra, Australia.
16. Perret J, **Bowatte G**, Lodge C, Knibbs L, Gurrin L, Lowe A, Burges J, Thompson B, Kandane-Rathnayake R, Markos J, Morrison S, Marks G, Tang M, Abramson M, Walters E, Matheson M, Dharmage S. The interaction between air pollution and smoking favours a 'healthy smoker effect' with regard to chronic airflow obstruction in middle-age. Thoracic Society of Australia and New Zealand conference 2017, Canberra, Australia.
17. **Bowatte G**, Lodge C, Knibbs LD, Erbas B, Dennekamp M, Lowe A, Perret J, Burgess AJ, Thompson B, Morrison S, Giles G, Marks GB, Abramson M, Walters H, Matheson M, Dharmage S. The association between traffic related air pollution exposure and allergic sensitization, asthma and lung function in middle age. Thoracic Society of Australia and New Zealand conference 2016, Perth, Australia.
18. **Bowatte G**, Lodge C, Lowe A, Erbas B, Perret J, Abramson M, Dennekamp M, Matheson M, Dharmage S. The influence of traffic related air pollution (TRAP) on asthma and allergies modified by polymorphisms in *GSTT1*, *GSTMI*, *GSTPI* and *GSTCD*. European Respiratory Society Congress. 2015, Amsterdam, Netherlands.
19. **Bowatte G**, Lodge C, Lowe A, Erbas A, Perret J, Abramson M, Dennekamp M, Matheson M, Dharmage, S. The influence of traffic related air pollution on asthma and allergies modified by polymorphisms in *GSTT1*, *GSTMI*, *GSTPI* and *GSTCD*. American Thoracic Society international conference 2015, Denver, Colorado, USA.
20. Fuertes E, Markevych I, **Bowatte G**, Gruziova O, Gehring U, Becker A, Berdel D, Brauer M., Carlsten C, Chan-Yeung M, Dharmage S, Hoffmann B, Koppelman G, Kozyrskyj A, Korek M, Lodge C, Pershagen G, Sugiri D, Wijga A, Heinrich J. Residential greenness and childhood allergic rhinitis and aeroallergen sensitization: a meta-analysis of seven birth cohorts. International Society for Environmental Epidemiology Congress. 2015, Sao Paulo, Brazil.
21. Fuertes E, Markevych I, **Bowatte G**, Gruziova O, Gehring U, Becker A, Berdel D, Brauer M. Carlsten C, Hoffmann B, Kozyrskyj A, Lodge C, Pershagen G, Wijga A, Heinrich, J. Associations between residential greenness and childhood allergic rhinitis and aeroallergen sensitization in seven birth cohorts. 4th Paediatric Allergy and Asthma Meeting - PAAM 2015, Berlin, Germany.
22. **Bowatte, G.**, Lodge C, Lowe A, Erbas A, Perret J, Abramson M, Dennekamp M, Matheson M, Dharmage S. *GSTT1* polymorphism modifies the association between traffic related air pollution at birth and subsequent asthma and lung function. Thoracic Society of Australia and New Zealand conference 2015, Gold Coast, Australia.
23. Alif S, Dharmage S, Lodge C, Lowe A, Karahalios A, **Bowatte G**, Benke G, Dennekamp M, Mehta A, Miedinger D, Kunzli N, Probst-Hensch N, Matheson, M. Occupational exposure assessed by the Job Exposure Matrix and risk of Chronic Obstructive Pulmonary Disease: a systematic review and meta-analysis of population-based studies. Thoracic Society of Australia and New Zealand conference 2015, Gold Coast, Australia.
24. **Bowatte G**, Lodge C, Lowe A, Erbas A, Perret J, Abramson M, Dennekamp M, Matheson M, Dharmage S. The influence of early life traffic related air pollution exposure on asthma, allergy and sensitization: a systematic review and a meta-analysis of birth cohort studies. Australasian Society of Clinical Immunology and Allergy conference 2014, Melbourne, Australia.

25. **Bowatte G**, Lodge C, Lowe A, Erbas A, Perret J, Abramson M, Dennekamp M, Matheson M, Dharmage S. Relationship between exposure during early life to traffic related air pollution and respiratory outcomes in childhood. CASANZ 2013, Sydney, Australia.
26. **Bowatte G**. and Ranawana KB. Amphibian assemblage along Kevumkahata Ela in Hantana mountain range, Sri Lanka. Peradeniya University Research Sessions. 14 (I) pp 311-312.

## **Awards**

- 2017** European Respiratory Society (ERS) 2017 Young Scientist Award
- 2017** Melbourne School of Population and Global Health Head's Award for Excellence in Doctoral Research

## **Serving in Professional Bodies**

1. Editorial Board Member EC Pulmonology and Respiratory Medicine
2. Member of Environmental Justice Australia's Science Advisory Group
3. Committee Member in Early career network – Faculty of Medical Dentistry and Health Sciences, The University of Melbourne
4. Member of Clean Air Society for Australia and New Zealand
5. Member of European Respiratory Society
6. Member of Thoracic Society of Australia and New Zealand
7. Member of International Society for Environmental Epidemiology

## **Panels Chairs and contributions**

1. Chair of a symposium “Pathways linking greenspace exposure to health outcomes” at the ISEE 2017 conference 25<sup>th</sup> September Sydney
2. Co-Chair oral presentation session “Ambient air pollution & other childhood respiratory effects” at the ISEE 2017 conference 27<sup>th</sup> September Sydney
3. Chair of a poster session at the ISEE 2017 conference 25<sup>th</sup> September Sydney
4. Panel member of session “Diving into the graduate student journey” at the 4<sup>th</sup> Annual Melbourne School of Population and Global Health Graduate Student Conference 6<sup>th</sup> December 2017 Melbourne
5. Contributed to the panel discussions at “National Air Pollution Standards and Lung Health” meeting organized by Environmental Justice Australia to reduce air quality standards for NO<sub>2</sub> and SO<sub>2</sub> - advocacy efforts aiming to impact the policy review

## **Grants: Research Grants**

1. **Bowatte G**, Morawska L, Knibbs L, Weerasooriya R, Dharmage, S. Building a 3D air pollution model for the city of Kandy, Sri Lanka: a platform to evaluate health outcomes. Centre for Air pollution, energy and health Research (CAR), Australia 2018 - A\$ 20000.00



2. **Bowatte G**, Heyworth J, Dharmage S. Addressing environmental health challenges in Sri Lanka. New Colombo Plan Scholarships - funded by the Australian Federal Government. 2018 - A\$ 28000.00
3. Zosky G, **Bowatte G**, Dharmage, S. Identification of novel biomarkers of pollution in adults. Centre for Air pollution, energy and health Research (CAR), Australia 2018 - A\$ 19033.00
4. University of Melbourne Early Career Grant – 2017. **Bowatte G**, Zosky, G, Dharmage, S. Vitamin D, respiratory health and interactions with air pollution (A\$ 40000.00)
5. CAR seeding grant-2015. **Bowatte G**, Lodge C, Guo Y. and Dharmage, S. Forming an international collaboration to investigate relevance of residential greenness in allergies and lung health (A\$ 20000.00)
6. CAR seeding grant-2017. Cowie C, **Bowatte G**, Morgan J, Marks G. Knowledge scoping of research into the health co-benefits of transitioning from current energy sources to cleaner energy (A\$ 20000.00).
7. CAR grant to organize a symposium within ISEE 2017 conference. **Bowatte G** and Dharmage, S. Pathways linking greenspace exposure to health outcomes (A\$ 10000)

## **Travel Grants**

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| <b>2017</b> | Centre for Air Quality and Health Research Evaluation (CAR) travel award to attend International Society for Environmental Epidemiology (ISEE) conference 2017 in Sydney (\$ 3000).        |
| <b>2017</b> | European Respiratory Society (ERS) 2017 Young Scientist Award to attend to the ERS 2017 conference in Milan, Italy (Euro 1000).  |
| <b>2017</b> | Centre for Air Quality and Health Research Evaluation (CAR) International Postdoctoral Training Grant to participate in a month-long training program in Germany and Sweden (\$ 7500).     |
| <b>2017</b> | Centre for Air Quality and Health Research Evaluation (CAR) travel award 2017 to attend European Respiratory Society (ERS) international congress 2015 in Milan, Italy (\$ 1500).          |
| <b>2015</b> | Centre for Air Quality and Health Research Evaluation (CAR) travel award 2015 to attend European Respiratory Society (ERS) international congress 2015 in Amsterdam, Netherlands (\$ 1500) |
| <b>2015</b> | The University of Melbourne International Travel Award to attend ERS 2015 in Amsterdam, Netherlands (\$ 2000)  |
| <b>2014</b> | Population Health Investing in Research Students' Training (PHIRST) travel award by Melbourne School of Population and Global Health (\$ 1500)   |

## **Dissemination of Knowledge**

1. Chair of the organizing committee of “Pathways linking greenspace exposure to health outcomes” symposium at the ISEE 2017 conference 26<sup>th</sup> September Sydney

2. Chair of the organizing committee of three-day workshop on “Greenness and Health”. 5<sup>th</sup> – 7<sup>th</sup> December 2016 Melbourne.
3. Hosted monthly CAR online seminar series March 2014 – February 2014.

### **Presentations and Talks**

1. Invited presentation at Transport and Health Research Network: “Traffic Related Air Pollution Exposure and Allergic Airway Disease”. Melbourne, 26 November 2015
2. Invited presentation CAR online seminar series: “The association between traffic related air pollution exposure and allergic sensitization, asthma and lung function in middle age”. Melbourne, 25 November 2015
3. Oral presentation at the ERS international congress 2015: “The influence of traffic related air pollution (TRAP) on asthma and allergies modified by polymorphisms in *GSTT1*, *GSTMI*, *GSTP1* and *GSTCD*. European Respiratory Society Congress”. Amsterdam, Netherlands, 30 September 2015
4. CAR expert meeting: “Middle age traffic related air pollution exposure on asthma and lung health”. Sydney, 2 April 2015
5. ‘Middle age traffic related air pollution exposure on asthma and lung health’. Presentation at the Centre for Air Quality and Health Research Evaluation (CAR), Sydney, Australia 2015.
6. ‘The influence of traffic related air pollution on asthma and allergies modified by polymorphisms in *GSTT1*, *GSTMI*, *GSTP1* and *GSTCD*’. Presentation at air pollution exposure assessment organized by CAR, Sydney, Australia 2014.
7. ‘The influence of childhood traffic-related air pollution exposure on asthma, allergy and sensitisation: a systematic review and a meta-analysis of birth cohort studies’. Presentation at the CAR investigators meeting in Brisbane, Australia 2014.
8. Invited presentation by CAR online seminar series on traffic air pollution, asthma and allergies in children, March 2014.

### **Other presentations at the Allergy and Lung Health Unit, Melbourne School of Population and Global Health, The University of Melbourne**

1. “Air pollution/greenness and allergic airway disease” 17 November 2015
2. “Are the associations of long term traffic related air pollution exposure on asthma, wheeze and lung function modified by *GST* variants?”; 04 November 2015
3. “Do the associations of long term traffic related air pollution exposure on asthma, wheeze and lung function modified by *GST* variants?”; 04 November 2015
4. “Middle age traffic related air pollution exposure and allergic sensitization modified by *GSTT1*, *GSTMI* and *GSTP1* variants”; 24 June 2015
5. “Glutathione S-transferase gene polymorphisms and traffic related air pollution as interactive risk factors for childhood/adolescence asthma and allergy”; 03 December 2014
6. “Long term impact of traffic related air pollution (TRAP) on allergy and lung health”; 02 June 2014
7. “Relationship between exposure during early life to traffic on allergy and lung health”; 2nd October 2013
8. “Longitudinal exposure to traffic related air pollution and lung health”; 2nd May 2013
9. “Methods of geocoding”; 18th February 2013
10. “Geocoding 1968 address data”; 6 February 2013

## **Workshops and symposium**

- 2017** Application of Low Cost Sensors and Their Networks for Urban Air Quality Monitoring - 19 October 2017, Brisbane, Australia
- 2016** Greenness and Health workshop organized by Centre for Air Quality and Health Research Evaluation, Melbourne - 5<sup>th</sup> – 7<sup>th</sup> December 2016 Melbourne.
- 2015** Air pollution and Toxicology Workshop organized by Centre for Air Quality and Health Research Evaluation, Melbourne, Australia (2<sup>nd</sup> June 2015)
- 2014** Air pollution exposure assessment workshop organized by Centre for Air Quality and Health Research Evaluation, Sydney, Australia (10-11<sup>th</sup> December 2014)
- 2014** R statistical program workshop organized by Centre for Air Quality and Health Research Evaluation, Brisbane, Australia (24-25<sup>th</sup> July 2014)
- 2013** Community and scientific Engagement forum: air pollution Forum, organized by Centre for Air Quality and Health Research Evaluation, Newcastle, Australia (23-25<sup>rd</sup> September 2013)
- 2013** Assessing the health impact of air pollution and translation of research into policy. Woolcock Institute for Health Research, University of Sydney, Australia (20<sup>th</sup> September 2013)
- 2013** Exposure assessment methods in air pollution epidemiology – current and emerging, Woolcock Institute for Health Research, University of Sydney, Australia (19<sup>th</sup> September 2013)
- 2013** EPA Melbourne: “Vehicle emissions, noise and fuel information session” Melbourne, Australia (2<sup>nd</sup> September 2013)
- 2013** STATA workshops organized by the Royal Children’s Hospital, Melbourne, Australia (7-8<sup>th</sup> May 2013)
- 2009** Participated in three days ‘Intensive Course on Applied Epidemiology’ (Post Graduate Institute of Science, University of Peradeniya)
- 2009** Participated in the two day ‘Symposium on Effective Synergization of Water Resources and Landscape Management’ (Postgraduate Institute of Science at University of Peradeniya)

## **Collaboration with Other Institutions**

1. Collaboration with Dr. Luke Knibbs from the University of Queensland, Australian National University (ANU) and CSIRO access modelled air quality data for Australia.
2. International collaboration with German Research Centre for Environmental Health to study the effect of greenness in allergies and lung health as a part of large collaborative study including birth cohorts from North America and Europe.
3. Collaboration with Queensland University of Technology – use of small sensors in monitoring air pollution.
4. Collaborations between Australia, China and Germany to investigate the effect of NDVI exposure in middle age using data from two longitudinal adult cohorts from Australia and China.
5. Collaborations with Umea University, Sweden to investigate effects of air pollution on pregnancy outcomes.
6. Collaborations with Sun Yat-Sen University, Guangzhou, China to investigate environmental pollution and human health

## **Academic Distinctions**

- 2016** Nominated for the Chancellor's Prize for the best PhD thesis at the University of Melbourne by both the PhD thesis examiners
- 2013** Melbourne International research scholarship awarded by the University of Melbourne (\$ 77000)
- 2013** Melbourne International Fee Remission Scholarship awarded by the University of Melbourne (\$ 250000)
- 2013** Top up scholarship awarded by Centre for Air Quality and Health Research Evaluation (CAR), a NHMRCH centre for research excellence, Australia (\$ 26250)
- 2012** PhD research scholarship awarded by Centre for Air Quality Research and Health Research (CAR), a NHMRCH centre for research excellence, Australia (\$ 77000 - Declined)
- 2012** Top up Scholarship in Epidemiology and Biostatistics awarded by School of Population Health, The University of Melbourne, Aug 2012 (\$ 22000 - Declined)

## **Supervision of Postgraduate Students**

1. Co-supervising a PhD student - The University of Melbourne. Project title – “Effects of hormones on lung function and asthma in adults” (Brittany Campbell 2017)
2. Supervised a Master of Public Health student for final year research project, The University of Melbourne. Project title – “Change in latitude from childhood to middle-age and risk of allergic disease in middle age” (Golam Rabbani 2015)

## **Experience in Examination of Dissertations, Grants, Papers and Conference Abstracts**

### **Peer reviewed grants**

The Danish Council for Independent Research. Impact of Exposure to Air Pollution on Asthma Development: A Multi-Exposure Assessment 2017. Grant value – (Euro 5,775,250)

### **Peer review thesis/reports**

Reviewed two Master of Public Health, University of Melbourne research projects in 2016 and 2017

### **Papers reviewed for journals**

*Environment International*, July 2018

*International Journal of Environmental Research and Public Health*, July 2018

*International Journal of Environmental Research and Public Health*, December 2017

*Scientific report*, July 2017

*International Journal of Environmental Research and Public Health*, June 2017

*Clinical & Experimental Allergy*, June 2017

*International Journal of Environmental Research and Public Health*, May 2017

*International Journal of Environmental Research and Public Health*, February 2017  
*Canadian Journal of Epidemiology*, January 2017  
*Environmental Pollution*, November 2016  
*PlosOne*, March 2015  
*Allergy*, March 2015  
*Environmental Health Perspectives*, February 2015  
*BMC public health*, July 2014  
*Journal of Clinical and Experimental Allergy* – April 2014

**Reviewed conference abstracts**

Invited abstract reviewer for the International Society for Environmental Epidemiology conference, Sydney, Australia 2017.

Invited abstract reviewer for the International Society for Environmental Epidemiology conference, Rome, Italy 2016.