

tiara Tick Induced Allergies
Research & Awareness

ANNUAL REPORT

2014

TiARA (Tick-induced Allergies Research & Awareness) Committee was convened by Clinical Associate Professor Sheryl van Nunen and first met on 26th March 2013.

The inaugural TiARA Committee comprised

- **Professor Antony Basten AO**
- **Professor Nicholas Cowdery AM**
- **Emeritus Professor Derek Anderson AM**
- **Associate Professor Kevin Broady**
- **Maria Said RN**
- **Dr Andrew Ratchford**
- **Stephen Doggett**
- **Edith Arns**
- **Geoff Cook**
- **Dr Stephen Ginsborg**
- **Clinical Associate Professor Sheryl van Nunen**

Now joined by

- **Professor Emeritus Paul Canfield**
- **A/Professor Raymond Mullins**

Professor Nicholas Cowdery chaired the first TiARA Committee Meeting for 2014 on Tuesday 18th March and our second meeting on Tuesday 1 July 2014. Professor Antony Basten chaired our meetings on Tuesday 26th August 2014 and Tuesday 18th November 2014, all held in Meeting Rooms 3J/3K in the Acute Services Building at Royal North Shore Hospital.

We have been fortunate in having Professor Emeritus Paul Canfield, a distinguished veterinarian join us from November 2013 and in March 2014 A/Professor Raymond Mullins, a distinguished Clinical Immunologist and Allergist accepted our invitation to join the TiARA Committee. A/Professor Mullins has described the significance and prevalence of gelatine allergy in mammalian meat allergy.

TiARA Committee Meetings March, July, August and November 2014.

TiARA Committee Meeting Tuesday 18th March 2014.

The meeting on Tuesday 18th March 2014 was chaired by Professor Nicholas Cowdery, who summarised the positive impact of recent TiARA media contributions, particularly the article by Louise Williams from the UTS Centre for Independent Journalism and the Channel 7 news segment. Feedback indicates that these contributions have helped to validate the experiences of known sufferers of these tick-induced allergies whilst reaching out to the community and giving them a greater awareness of TiARA, tick-induced allergies and tick bite management. Maria Said reported that the A&AA Newsletter had been effective in disseminating the information regarding tick-induced allergies as well.

Professor Emeritus Derek Anderson's survey of first aid organisations tick removal practices and council websites revealed that of 5 local councils, Government web sites & First Aid providers surveyed, the majority showed very little or no information on the management of tick bite. Those that do, including NSW Health, show use of tweezers and other tick extractors, deemed unsuitable for tick-induced allergy primary or secondary prevention.

A presentation at the National Emergency Nurse Practitioner Conference by Clinical A/Professor Sheryl van Nunen (an opportunity facilitated by Dr Andrew Ratchford) had 150 attendees was well received and is to be posted on the National Nurse Practitioner website.

TiARA Committee Meeting Tuesday 1 July 2014.

The meeting on Tuesday 1 July was chaired by Professor Nicholas Cowdery, who welcomed Sean Granger, Co-ordinator, Parks and Bushland for Manly Council. Sean then presented a summary of his and Chris Ward's ground-breaking work in developing TRIM (Tick-Related Injury Management) Program for the Manly LGA (Local Government Area) as "Planning for and managing ticks in the workplace". Sean's presentation was very well received by all and congratulations upon the development of the program were extended by Professor Nicholas Cowdery on behalf of TiARA.

Dr Stephen Ginsborg updated the Committee on the continued goodwill from the Medicare Locals and their willingness to continue to help TiARA with dissemination of information to health professionals once their existence is ratified at the Federal government level.

Placement of TiARA pamphlets by Bronwen Jewell (Pittwater Council's WHS Co-ordinator) in Pittwater Council's Mona Vale and Avalon Customer Service Centres and the establishment of a link to www.tiara.org.au and associated websites was noted with appreciation.

Professor Nicholas Cowdery noted with gratitude donations received of \$500 (from Mr Owen Paterson), painting "Over near Cooma" (Michael Zaiter) valued at \$4000 (this donation arranged by Kathy Kai from Ku-ring-gai Council). The painting by Michael Zaiter has been donated for a fundraising function of the TiARA PSG and the Co-chairs of the TiARA Committee signed a Certificate of Appreciation to be forwarded to each donor.

TiARA Committee Meeting Tuesday 26th August 2014.

The TiARA Committee Meeting on Tuesday 26th August 2014 was chaired by Professor Tony Basten who welcomed Chris Ward, Corporate WH & S Co-ordinator, Manly Council, who presented his experience with the TRIM (Tick-Related Injury Management) Program, Manly Local Government Area (LGA) which he and Sean Granger set up, "WH & S Legislative requirements: managing hazards and WH&S process in identifying and developing the controls used." Professor Tony Basten congratulated Chris (and Sean) upon the setting up of this program and all at the Committee meeting were most impressed with the approach Manly Council has taken with this initiative and with the data put before us by Chris Ward regarding the magnitude of the problem tick bites and their sequelae are in the WHS setting in tick hyper-endemic areas (20/22 injury reports due to tick bites).

Receipt of a cheque for \$2400 to TiARA from Chatswood Rotary presented to Clinical A/Professor Sheryl van Nunen (SVN) on behalf of the TiARA Committee at the Chatswood Rotary Club

changeover dinner on 2 July 2014 (at which time he was installed as the Chatswood Rotary Club President), was noted with gratitude by the Committee. These funds have been donated by Chatswood Rotary Club for application to our Awareness initiatives, in particular, the printing and distribution of TiARA's Pamphlet #2 "Preventing and Managing Tick Bites" (a copy of which is attached). A letter of thanks to Chatswood Rotary Club was sent by the TiARA Convenor on behalf of TiARA.

Professor Tony Basten proposed a Vote of Thanks to Alphapharm (distributors of Epipen) for their generous donation of a further 10,000 TiARA #1 pamphlets "Allergic Conditions caused by Tick Bites". All present noted their appreciation and noted Alphapharm's commitment to distributing the pamphlets to pharmacists that they visit in the course of their work and noted that they have also offered to distribute pamphlet #2 "Preventing and Managing Tick Bites" thus as well.

Maria Said (in the absence of Professor Derek Anderson, Chair of the Steering Committee for the TiARA PSG [Patient Support Group]) reported the progress made with the formation of the TiARA Patient Support Group (PSG) Sub-committee with a preliminary meeting held 19th August 2014. Maria Said noted a very productive meeting with a committed group of supporters had been held on that day, with the group arranging to meet for further discussions at a subsequent meeting scheduled for October, with plans to then present the outcomes for consideration by TiARA that this group be constituted as a sub-committee of TiARA, after inquiries are made of the RNSH Communications Team as to the most appropriate means of constituting this group. Professor Emeritus Anderson asked that the very useful contributions of TiARA members Professor Nicholas Cowdery and Maria Said at this initial meeting be noted.

TiARA Committee Meeting Tuesday 18th November 2014.

Professor Tony Basten chaired the TiARA Committee Meeting on Tuesday 18th November 2014.: Professor Emeritus Paul Canfield presented his report on the Veterinarians Awareness Program (see below, page 5). This program has been driven by Professor Emeritus Canfield and has been a very systematic and successful program reaching potentially every veterinarian in Australia. TiARA is grateful to the Centre of Veterinary education at The University of Sydney and Provet Pty Ltd in helping him achieve our aims in awareness of tick-induced allergies in humans and the prevention and management of tick bites in humans as well.

Professor Emeritus Derek Anderson presented his report on the preliminary meetings of the TiARA Patient Support Group (PSG) Steering Sub-committee and proposed that the TiARA Committee support the formation of the TiARA PSG Sub-committee and outlined the progress and plans for this group, including the planning of a public meeting at Mona Vale Hospital early in 2015. Professor Tony Basten thanked Professor Emeritus Derek Anderson for his work with this project and noted the contributions of Maria Said, Professor Nicholas Cowdery, Joy Cowdery, Janelle Williams, Ray and Jenni Rampton, Sallie Warde, Louise Williams, Merran and Jo Cunningham and the support of Ian and Margaret Dunlop.

A/Professor Kevin Broady updated the TiARA Committee on the University of Queensland's research in "Control of Tick Populations by Treatment of Free Living Bandicoots" by A/Professor Peter Murray

from their School of Agriculture and Food Sciences. TiARA is hopeful that such research may provide a tick control process which might result in a reduction in the prevalence of tick-induced allergies.

The Committee was also updated on progress with a tick removal device being developed by Dr Stephen Ginsborg.

The Willoughby, Manly and Pittwater Councils award-winning Tick Education Program will be published on pertinent websites shortly. TiARA (via the presentations of Stephen Doggett and Clinical A/Professor Sheryl van Nunen) is very pleased to have contributed to the development and delivery of this WHS program.

A Summary of TiARA Achievements in 2014

TiARA was established in order

- ❖ To promote awareness of tick-induced allergies by the public, health professionals, those in at-risk occupations, educators and government.
- ❖ To provide resources and support for sufferers of tick-induced allergies who live remote from expert medical and dietetic advisors.
- ❖ To promote research into the prevention & cure of tick-induced allergies.
- ❖ To disseminate established tick management strategies and help develop novel, proven tick management measures.

Progress with Awareness Goals in 2014

Public awareness:

- First aid organisations tick removal survey and council website reviews: Emeritus Professor Derek Anderson. Reviewed 5 local councils, Government web sites & First Aid providers and determined that they show very little or no information on the management of tick bite. Those that do, including NSW Health, show use of tweezers and other tick extractors, deemed unsuitable for tick-induced allergy primary or secondary prevention.
- Our website continues to be busy receiving up to 612 hits in October alone for example. www.tiara.org.au & links to www.allergy.org.au, www.allergyfacts.org.au and vice versa and www.medent.usyd.edu.au have been very helpful for the public.
- The revised Allergy & Anaphylaxis Australia website and Australasian Society of Clinical Immunology & Allergy (ASCIA) link established to www.tiara.org.au . AER (ASCIA Educational Resources) article on Tick Allergies 2014 version has been very popular with the public seeking information regarding tick-induced allergies as well

- A/Professor Kevin Broady's audio version of the "Allergies Provoked by Tick Bites" presentation placed on the website has been a great improvement.



Health professional awareness:

- Pamphlets „Allergic Conditions caused by Tick Bites“ and „Preventing and Managing Tick Bites“ continue to be distributed to all Emergency Department waiting rooms in our region- Mona Vale, Royal North Shore, Manly, Hornsby, Ryde & Sydney Adventist Hospitals.
- Pamphlets above distributed to GPs.
- Pamphlets, e-pamphlets and website details distributed to pharmacists in tick-endemic areas.
- Invited editorial in the Royal Australasian College of Physicians journal highlighted the risks of cetuximab therapy in mammalian meat allergic individuals (van Nunen SA. Treatment outcomes of rapid desensitisation protocols Internal Medicine Journal 2014; 44(5):431-433. DOI 10.1111/imj.12412 12 MAY 2014).
- An invited review of the world-wide experience of mammalian meat allergy was published in September 2014 (van Nunen S. Galactose-Alpha-1,3-Galactose, Mammalian Meat and Anaphylaxis: A World- wide Phenomenon? Current Treatment Options in Allergy. September 2014; Vol 1, Issue 3:262- 277.DOI: 10.1007/s40521-014-0022-0).
- Presentations at Scientific Meetings: International posters: 2; National posters: 1.

At-risk occupation awareness:

- Development and delivery of a Tick Education Program for Council staff at Willoughby, Manly and Pittwater Councils.

These councils were awarded second place in the StateCover Excellence in WHS Awards for their Tick Education Program for 2014

Veterinarians Awareness Program:

Professor Paul Canfield has facilitated placement of information regarding tick-induced allergies and the prevention and management of tick bites on the Veterinary Practitioners Board website (van Nunen SA, Canfield PJ. Information on human tick-related diseases for veterinary practitioners. Boardtalk Issue 40, May 2014. Veterinary Practitioners Board website. www.vpb.nsw.gov.au), organised distribution of our „Preventing and Managing Tick Bites“ via Provet Pty Ltd and placement of an article in the Spring issue of Provet's magazine distributed to all veterinarians in Australia (van Nunen S, Canfield P. How much do you know about human tick-related diseases? Information That Will Prove Useful To Your Clients. Partners In Practice, Spring 2014: 28-30) and organised placement of an article in the Centre of Veterinary Education's

Control and Therapy Series (van Nunen S, Canfield P. How much do you know about human tick-related



diseases? CVE Control and Therapy Series 2014: 276; 23- 24).

Government awareness:

- Local: Presentations given for local councils (2).
- State (NSW): Meeting with Dr Michael Staff, Northern region Public Health Officer regarding updating of tick removal advice by NSW Health.
- Federal: Australian Government is revising their tick removal advice after representations by TiARA. Stephen Doggett has been given this task and the Australian Government has welcomed input from the TiARA Convenor and are cognisant of the ASCIA 2014 Recommendations regarding tick removal for allergic individuals.

Media Awareness:

- Local media: 3 articles
- Radio: 5 interviews
 - 2014 ABC Science: Dr Karl: Mammalian meat and tick bites
 - 2014 ABC South East NSW: Mammalian meat and tick bites
 - 2014 ABC Margaret Throsby Midday Program
 - 2014 ABC Science Dr Karl's Great Moments in Science
 - 2014 ABC Science Robyn Williams The Science Show 4.10.14
- National media: 2 articles, Sunday Telegraph, including „Body and Soul“
- Medical newspapers: 1 article
- Online media presentations: ABC Science Online Audio 2/2014

ABC Margaret Throsby Midday Program 3/2014

ABC Science Online Dr Karl's Great Moments in Science

ABC Science Online Robyn Williams The Science Show 4.10.14

Special Interest Groups Presentations:

- Turramurra Neighbourhood Program

**Progress with provision of resources and support for sufferers of tick-induced allergies
who live remote from expert medical and dietetic advisors**

Continuing availability of the website resources of TiARA Ambassadors' tips and encouragement delivered by personal recounts with considered advice presenting practical solutions to everyday challenges in dealing with tick-induced allergies, both mammalian meat anaphylaxis (cow's milk allergy, if present) following tick bite and tick bite- induced anaphylaxis, has been helpful to sufferers around Australia and overseas.

Likewise, TiARA's Consultant Dietitian's, Mrs Lesley Clarke's, dietary management resources for mammalian meat allergy sufferers which have been posted on the TiARA website. "Achieving Adequate Nutrition", "Mammalian Meat Free Diet Guidelines" & "Dietary Iron" has been a very useful and well-used resource for those people with these complaints who live remote from specialist dietetic help.

Progress with promotion of research into the prevention & cure of tick-induced allergies.

A/Professor Kevin Broady reported progress with a study by A/Professor Peter Murray who is currently investigating the prospect of treating the natural host of the tick, the bandicoot, with an insecticide, thereby reducing the tick burden and thereby possibly reducing the number of individuals with tick-induced allergies.

Emeritus Professor Derek Anderson AM presented a report to TiARA reviewing the predicted deleterious effects with burgeoning tick numbers following on from climate change predictions.

Geoff Cook and Edith Arns continue to trial the usefulness of tick bite prevention strategies in exposed workers.

Dr Andrew Ratchford and Stephen Doggett continue their collaboration with colleagues from Murdoch University, led by Dr Peter Irwin, in an ARC Linkage Grant on tick disease transmission.

Clinical A/Professor Sheryl van Nunen presented research findings in mammalian meat anaphylaxis at the European Academy of Allergy and Clinical Immunology in Copenhagen in June 2014 (van Nunen S, Mullins R, Baumgart K, Fernando S, Fulton R, Ratchford A, Broady K, Basten A. Alphagal and Mammalian Meat Specific-IgE in Mammalian Meat Tolerant Tick Anaphylaxis Sufferers. *Allergy* 2014; Vol 69, s99;1-646. and Baumgart KW, Mok A, Sivertsen T, Mullins R, van Nunen S. Allergen-specific IgE after Anaphylaxis to Tick or Mammalian/Marsupial Meat in Australia. *Allergy* 2014: Vol 69, s99;1-646.

Dr Stephen Ginsborg has developed a prototype tick removal device and continues to trial this device. He is also continuing his investigations as to whether our Aboriginal Australians know of natural means of controlling ticks.



TiARA presented their analysis of tick removal practices in tick anaphylaxis sufferers at the Australasian Society of Clinical Immunology and Allergy Conference in Melbourne in September 2014 (Sheryl van Nunen, Antony Basten, Nicholas Cowdery, Derek Anderson, Paul Canfield, Kevin Broady, Maria Said, Andrew Ratchford, Stephen Doggett, Edith Arns, Geoff Cook, Stephen Ginsborg, Raymond Mullins. Tick removal techniques practised by tick anaphylaxis sufferers. Internal Medicine Journal 2014;44;Issue Suppl S4;1-37. DOI 10.1111/imj.12546).

Progress with dissemination of established tick management strategies and development of novel, proven tick management measures.

Publication of our second pamphlet "Preventing and Managing Tick Bites" was made possible by the generous donation of in-kind services of Rob Hall, Program Director of the Ku-ring-gai Rotary Club and the support of Tony McClelland, President and Greg Newling of Ku-ring-gai Rotary Club and the generous donation from Chatswood Rotary Club.

Stephen Doggett has revised the Australian Government Health advice as noted above, with input from TiARA and ASCIA information presented to them.

TiARA End of Year Function Tuesday 18th November 2014

The TiARA End of Year Function for the Committee and our Supporters was held on 18th November 2014.

Professor Antony Basten AO kindly presented Certificates of Appreciation to

Ray and Jenni Rampton

For their sustained commitment to supply of TiARA pamphlets to health care facilities

Alphapharm: Eilise D'Arcy and her Pharmacists Team

For their sustained commitment to pharmacists' education in tick endemic areas & For their donation of 10,000 pamphlets "Allergic Conditions caused by Tick Bites"

Joy Cowdery

For her excellent sustained representation of TiARA in the media in 2014

Ku-ring-gai Rotary Club: Rob Hall (TiARA Project Manager), Tony McClelland (President), Greg Newling (TiARA Project Finance Co-ordinator)

For their generous support of the development, printing and distribution of TiARA pamphlet "Preventing and Managing Tick Bites" & the video "Tick Removal Techniques" for allergy prevention

Kathy Kai

For her sustained contribution to TiARA in organising Ku-Ring-Gai Council Information evenings



Councils Tick Education Program: Jasmine Yee Yet (StateCover Mutual Limited WHS Specialist), Louise Hudson (Safety Management Co-ordinator, Willoughby Council), Chris Ward (Corporate WH & S Co-ordinator, Manly Council), Sean Granger (Co-ordinator Parks and Bushland, Manly Council), Bronwen Jewell (WHS Co-ordinator, Pittwater Council), Chris Williams (Creeks Co-ordinator, Willoughby Council).

For the development of their award-winning comprehensive WHS tick education program

Centre for Veterinary Education, University of Sydney: Elisabeth Churchward

For supporting the dissemination of TiARA's material on tick allergies to practising veterinarians through the article in "Control and Therapy"

Provet Pty Ltd (A Henry Schein company). Dr Garth McGilvray AM and Sonya Shanahan.

For supporting the dissemination of TiARA's material on tick allergies to practising veterinarians through an article and pamphlet

Louise Williams

For her sustained commitment to TiARA via the media

The Williams Family

For continuing to fund the hosting of the TiARA website www.tiara.org.au

Blake Williams

For sustained contribution as Webmaster of the TiARA website

IN ABSENTIA:

Chatswood Rotary Club: Dieter Torheiden (2013-2014 President)

For their generous support of the printing and distribution of TiARA pamphlet "Preventing and Managing Tick Bites"

Adam Nazha

For his excellent sustained representation of TiARA in the media in 2014

Matt Lutze, Emergency Nurse Practitioner, Canterbury Hospital. Organiser 2014 National Emergency Nurse Practitioner Conference Organiser.

For his support of the awareness aims of TiARA via education of Emergency Nurse Practitioners

Sydney North Shore & Beaches Medicare Local: Kris Hume CEO

For their sustained commitment to disseminating TiARA information to health care professionals in 2014



ABC Science: Dr Karl: Dr Karl Kruszelnicki (Presenter)

For promoting awareness of tick-related allergies in internet, radio and print media

ABC Margaret Throsby: Midday: Margaret Throsby (Presenter), Mark Hastings and Michaela Kalowski (Producers)

For promoting awareness of tick-related allergies in radio and internet media

ABC Robyn Williams' The Science Show: David Murray (Producer) & Robyn Williams (Presenter)

For promoting awareness of tick-related allergies in radio and internet media

Professor Nicholas Cowdery AM then kindly presented Highlights of the Annual Report for TiARA for 2014.

Professor Basten has chaired our latter two meetings of 2014, overseen our scientific program and given sage advice over some years now regarding effective approaches to be taken in achieving TiARA's aims and arranged for Chatswood Rotary Club to have an educational presentation regarding TiARA's work which led to crucial support being offered by the Chatswood Rotary Club for our "Preventing and Managing Tick Bites" printing and distribution program.

Professor Cowdery has overseen the legal aspects of our website, written the disclaimers, given us the benefit of his extraordinary abilities in chairmanship at our March and June Committee meetings, checked our communications material prior to use and represented TiARA in the media with his wife, Joy Cowdery.

Since TiARA's inception in March 2013, (initially as a regional solution to help cope with serious allergic diseases), considerable progress has been made in the awareness of tick-induced allergies throughout the general community, in the provision of easily accessible expert information regarding the background to these problems and the diagnosis and management of these conditions, and in the provision of support, by means of our generous TiARA Ambassadors, who have given useful tips and encouragement for individuals living with mammalian meat-induced anaphylaxis and tick-induced anaphylaxis. From this beginning, TiARA now functions as a national health educational resource.

We look forward to further increasing our knowledge and understanding of tick-induced allergies, facilitating research and improving the quality of life for those affected by tick-induced allergies.

TiARA Benefactors and Supporters

We would like to thank all of those very generous individuals, families and organisations who have contributed to TiARA's progress in 2014. It would not have been possible to achieve any of our goals this year without your help and we look forward to your continued support in the years to come.

TiARA Committee Members

TiARA Committee members contribute considerable time to achieving the goals of TiARA, and do so in an honorary capacity. We are all grateful for the pleasant company and unparalleled expertise of



our TiARA Committee members. The remarkable achievements this year attest to the hard work of every member. Our meetings result in a renewed sense of purpose and the constitution of the Committee allows for a high degree of synergism in our efforts.

We would also like to thank Melanie Burk, Clinical Research Nurse in the Department of Clinical Immunology and Allergy at Royal North Shore Hospital for her facilitation of our Committee Meetings.

18 November 2013

Tony Basten

Professor Antony Basten AO

Nicholas Cowdery

Professor Nicholas Cowdery AM

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Financial Statement TiARA (Tick-induced Allergies Research and Awareness) Fund 2013

Gifts-in-Kind

\$3500 The Williams Family (website development, domain registration, website hosting)

\$ 700 Jana Pearce (pamphlet printing, pamphlet artwork)

Total=\$ 4200

Cash donations

\$ 200 Ray & Jenni Rampton (donation)

\$ 10 David Burbidge (donation)

\$ 500 Clinical Associate Professor Sheryl van Nunen

\$ 400 Surveytalk (directed donation for interview with Clinical A/Professor van Nunen)

Less 5% RNSH charge for processing donations

=\$ 1054.50

Interest earned

\$ 10 1/1/13-25/11/13

=\$ 1064.50

Outgoings

\$ 438 parking tickets for TiARA Committee members

=\$626.50

RNSH Administration charges

\$ 5

=\$621.50

Outstanding income

\$250 Ku-Ring-Gai Council Walks and Talks program (talk by Clinical A/Professor van Nunen)

CURRENT BALANCE @ 26.11.13=\$ 871.50CR

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