

## Curriculum Vitae

# Kerry Martin BONE

<b>Name:</b>	Adjunct Professor Kerry Martin Bone
<b>Position</b>	Director, Research and Development, MediHerb (1999 to present)
	Chairman MediHerb Board (2004 to 2008)
	Co-founded MediHerb in 1986
	Previous roles include Technical Director
<b>Date of Birth:</b>	17 October 1951
<b>Academic Qualifications:</b>	Bachelor of Science (Hons-First Class) in Chemistry from Melbourne University (1970 to 1973)
	Diploma in Phytotherapy from The School of Herbal Medicine, England (distinguished student) (1980 to 1984)
<b>Scholarships and awards:</b>	<p>Masson Memorial Scholarship Prize 1973, awarded to the top honours year chemistry student in Australia</p> <p>In 2015 Kerry's lifelong contribution to the field of herbal therapy was recognized with his receiving the prestigious Lady Cilento award from the complementary medicine industry in Australia.</p>
	State Electricity Commission of Victoria cadetship awarded to the top science applicant in Victoria
	Ormond College, Melbourne University, major scholarship
	Various small scholarships and prizes at Melbourne University.
<b>Professional Associations:</b>	National Institute of Medical Herbalists (England), Fellow (1997) (1984 to 2013)
	National Herbalists Association of Australia, Fellow (1996) (1985 to present)
	Royal Australian Chemical Institute, Associate Member (1976 to 2011)
	College of Practitioners of Phytotherapy, Member (1995 to present)
	Fellow, Australian Natural Therapists Association ANTA (2005 to present)
<b>Committees:</b>	Traditional Medicines Evaluation Committee, Member (1990 to 1997), advising the Australian government (TGA) on issues related to herbal medicine
	Committee for the Accreditation of Natural Medicine Colleges, Queensland, Member (1991 to 1992)

	Technical adviser to the National Herbalists Association of Australia (1995 to 2000 and 2003)
	American Herbal Pharmacopeia project (1998 to present)
	Technical expert at the Alternative Medicines Summit conducted by the Australian Government (1996)
	Chairman of CHC – TGA Herbal Taskforce (1998 to 2000)
	American Botanical Council Advisory Board (2011 to present)
<b>Lecturing and Education:</b>	Adjunct Associate Professor, University of New England (UNE) (2004 to 2007) (2010 – 2012)
	Associate Professor, University of New England (UNE) (2007 - 2009)
	Adjunct Professor New York Chiropractic College in Clinical Nutrition (2014 to present)
	Australian College of Natural Medicine, Brisbane, curriculum development and lecturing in herbal medicine to final year students (1990 to 1992)
	Guest lecturer at various conferences, including Oceania Symposium of Complementary Medicines (1989 to present)
	National Herbalists Association of Australia conferences, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2003, 2007, 2010
	Guest lecturer in herbal medicine at the School of Phytotherapy, UK (1994 to 1998)
	Seminars and conferences in the UK, USA, Australia, South Africa, Canada, Denmark and New Zealand (1989 to present)
	External Examiner at the School of Phytotherapy, UK, appointed for the University of Wales (1997 to 1998)
<b>Publications – Books:</b>	Bone, K. 1997. <i>Clinical Applications of Ayurvedic and Chinese Herbs: Monographs for the Western Herbal Practitioner</i> . Phytotherapy Press, Warwick. More than 7000 copies sold to date.
	Mills, S. & Bone, K. 2000. <i>Principles and Practice of Phytotherapy: Modern Herbal Medicine</i> . Churchill Livingstone, Edinburgh.  Used as a textbook for herbal and naturopathy courses in the UK, New Zealand, Australia, United States (e.g. Bastyr University) and Canada (College of Naturopathic Medicine in Toronto). More than 50,000 copies sold to date. Second edition published in 2013 (now Bone & Mills) and awarded

	<p>the James Duke Award by the American Botanical Council as the best book on medicinal plants published worldwide in 2013.</p>
	<p>Bone, K. 2003. <i>A Clinical Guide to Blending Liquid Herbs: Herbal Formulations for the Individual Patient</i>. Churchill Livingstone, St. Louis.</p> <p>Adopted as a first- and second-year text by the Australian College of Natural Medicine and other such colleges</p>
	<p>Bone K, Mills S. (eds). 2005. <i>The Essential Guide to Herbal Safety</i>, Churchill-Livingstone, St Louis. Awarded the inaugural 2006 James Duke Award by the American Botanical Council as the best book on medicinal plants published worldwide in 2005.</p> <p>Approximately 15,000 copies sold to date</p>
	<p>Bone, K. 2004, Chapter 14 “Echinacea: Quality, Uses, and Immunomodulating Activity from a Phytotherapist’s Perspective” In <i>Echinacea: The genus Echinacea</i>. Ed. Miller SC. CRC Press, Boca Raton, pp.203-215</p>
	<p>Bone, K. 2007, Chapter 7 “Evaluating, Designing, and Accessing Herbal Medicine Research” In <i>Veterinary Herbal Medicine</i>. Ed. Wynn, S. &amp; Fougère, B. Elsevier, St. Louis, pp. 87-97</p>
	<p>Bone, K. 2007, <i>The Ultimate Herbal Compendium: A Desktop Guide for Herbal Prescribers</i>. Phytotherapy Press, Warwick.</p>
	<p>Santich R, Bone KM. 2008, <i>Phytotherapy Essentials: Healthy Children: Optimising Children’s Health with Herbs</i>. Phytotherapy Press, Warwick.</p>
	<p>Matthias A, Lehmann R, Bone K. 2008 Echinacea in Health – Risks and Benefits. Chapter 74 in <i>Botanical Medicine in Clinical Practice</i>, RR Watson, VR Preedy.</p>
<p><b>Publications - Research Articles - Peer Reviewed</b></p>	<p>Papers published in the international journal ‘Analytica Chemica Acta’ and the national journal of the Royal Australian Chemical Institute (1970s)</p> <p>RBH Wills, K Bone, M Morgan. 2000, Herbal products: active constituents, modes of action and quality control. <i>Nut Res Rev</i> <b>13</b>: 47-77</p> <p>AMatthias, EMJ Gillam, KG Penman, NJ Matovic, KM Bone, JJ De Voss, RP Lehmann. 2005 Cytochrome P450 enzyme-mediated degradation of Echinacea alkylamides in human liver microsomes. <i>Chemico-Biological Interactions</i> <b>155</b>, 62-79</p> <p>LL Agnew, SP Guffogg, AMatthias, RPLehmann, KMBone, KWatson. 2005 Echinacea intake induces an immune response through altered expression of leukocyte hsp70, increased white cell counts and improved erythrocyte</p>

antioxidant defences. *Journal of Clinical Pharmacy and Therapeutics* **30**, 363-369

AMatthias, KG Penman, NJ Matovic, KM Bone, JJ De Voss, RP Lehmann. 2005 Bioavailability of Echinacea constituents: Caco-2 monolayers and pharmacokinetics of the alkylamides and caffeic acid conjugates. *Molecules* **10**: 1242-1251

LM Stevenson, A Matthias, L Banbury, KG Penman, KM Bone, D Leach, RP Lehmann. 2005 Modulation of macrophage immune responses by Echinacea. *Molecules* **10**: 1279-1285

A Matthias, RS Addison, KG Penman, RG Dickinson, KM Bone, RP Lehmann. 2005 Echinacea alkamide disposition and pharmacokinetics in humans after tablet ingestion. *Life Sciences* **77**: 2018-2029

PY Hayes, R Lehmann, K Penman, KM Bone, W Kitching, JJ De Voss. 2006 RP-HPLC Detection of a Processing Induced Artefact from Paeoniflorin In Dried Roots of *Paeonia lactiflora*. *Phytochemical Analysis*, **17**; 251-254

KB Penman, CW Halstead, A Matthias, JJ DeVoss, JMU Stuthe, KM Bone, RP Lehmann. 2006 Bilberry adulteration using the food dye amaranth. *Journal of Agricultural Chemistry and Food Science*, **54**; 7378-7382.

A Matthias, L Banbury, L Stevenson, KM Bone, DN Leach, RP Lehmann, 2007 'Alkylamides from Echinacea modulate induced immune responses in macrophages' *Immunological Investigations*, **36**, 117-130.

N Matovic, A Matthias, J Gertsch, S Raduner, KM Bone, RP Lehmann, JJ De Voss, 2007 'Stereoselective Synthesis, Natural Occurrence and CB2 receptor binding affinities of alkylamides from Herbal Medicines such as Echinacea sp.' *Organic and Biomolecular Chemistry*, **5**, 1, 169-174.

A Matthias, RS Addison, L Agnew, KM Bone, K Watson, RP Lehmann, 2007 'Comparison of Echinacea alkylamide pharmacokinetics between liquid and tablet preparations' *Phytomedicine*, **14**, 9, 587-590.

A Matthias, JT Blanchfield, KG Penman, KM Bone, I Toth, RP Lehmann, 2007 'Permeability studies of Kavalactones using a Caco-2 cell monolayer model' *Journal of Clinical Pharmacy and Therapeutics*,. **32**, 233-239.

CA Andrews, A Matthias, L Agnew, N Reinke, K Watson, KM Bone, RP Lehmann. 2007, Antioxidant effects of ascorbic acid and resveratrol - alone and in combination with Polygonum cuspidatum extract and other phytochemicals. *Journal of Medical Herbalism*, **19**(4): 157-161

A Matthias, L Banbury, KM Bone, D Leach, RP Lehmann, 2008 Echinacea alkylamides modulate induced immune

responses in T-cells *Fitoterapia* **79**(1): 53-58

B Barrett, D Rakel, B Chewing, L Marchand, D Rabago, R Brown, J Scheder, R Schmidt, JE Gern, K Bone, G Thomas, S Barlow, J Bobula. 2007 Rationale and Methods for a trial assessing Placebo, Echinacea and Doctor-Patient Interaction in the Common Cold. *Explore (NY)*; **3**, 6: 561-572.

A Chicca, F Pellati, B Adinolfi, A Matthias, I Massarelli, S Benvenuti, E Martinotti, AM Bianucci, K Bone, R Lehmann, P Nieri. 2008, Cytotoxic activity of polyacetylenes and polyenes isolated from roots of *E. pallida*. *Brit J Pharmacol*. Jan: 1-7

D van Die, H Burger, K Bone, M Cohen, H Teede. 2008 *Hypericum perforatum* with *Vitex agnus-castus* in menopausal symptoms. [Poster presented at 3rd Inter Cong Comp Med Res 2008, Sydney]. *J Altern Comp Med* **14**(1): S-87.

K M Bone. 2008, Potential Interaction of Ginkgo biloba Leaf with Antiplatelet or Anticoagulant Drugs: What Does the Evidence Imply? *Mol Nutr Food Res*, **52**(7): 764-771

C Calabrese, WL Gregory, M Leo, D Kraemer, K Bone, B Oken. 2008, Effects of a Standardized *Pacopa monnieri* Extract on Cognitive Performance, Anxiety, and Depression in the Elderly: A Randomized, Double-Blind, Placebo-Controlled Trial. *J Alt Comp Med* **14**(6): 707-713

KG Penman, KM Bone, RP Lehmann. 2008 Fringe Tree (*Chionanthus virginicus* L.) stem bark offers a sustainable alternative to root bark. *Aust Journal Medical Herbalism* **20**(3): 107-111

MD van Die, HG Burger, KM Bone, MM Cohen, HJ Teede. 2009 *Hypericum perforatum* with *Vitex agnus-castus* in Menopausal Symptoms. *Menopause* **16**(1): 156-163

MD Van Die, H Teede, K Bone, J Reece, H Burger. 2009 Predictors of Placebo Response in a Randomised, Controlled Trial of Phytotherapy in Menopause. *Menopause* **16**(4): 792-796.

MD van Die, KM Bone, HG Burger, JE Reece, HJ Teede. 2009 Effects of a combination of *Hypericum perforatum* and *Vitex agnus-castus* on PMS-like symptoms in late-perimenopausal women: Preliminary findings from a sub-population analysis. *Journal of Alternative and Complementary Medicine* **15**(9): 1045-1048

MD Van Die, HG Burger, KB Bone, HJ Teede. 2009 Response to 'Phytotherapy effective in menopausal dysphoric disorder (MDD)?' *Menopause* **16**(3): 616-617

MD Van Die, HG Burger, KM Bone, MM Cohen, HJ Teede. 2009 Author's Reply to Commentary on '*Hypericum perforatum* with *Vitex agnus-castus* in menopausal symptoms:

	<p>a randomized, controlled trial.' <i>FACT</i> <b>14</b>(1): 25-26</p> <p>J Sarris, DJ Kavanagh, J Adams, K Bone, G Byrne. 2009 Kava Anxiety Depression Spectrum Study (KADSS): A Mixed Methods RCT using an Aqueous Extract of <i>Piper methysticum</i> [Short Study]. <i>Comp Ther Med</i> <b>17</b>: 176-178.</p> <p>J Sarris, DJ Kavanagh, G Byrne, KM Bone, J Adams, G Deed. 2009 The Kava Anxiety Depression Spectrum Study (KADSS): A randomized, placebo-controlled, cross-over trial using an aqueous extract of <i>Piper methysticum</i>. <i>Psychopharmacology</i> <b>205</b>(3):399-407.</p> <p>J Sarris, DJ Kavanagh, G Deed, KM Bone. 2009 St. John's wort and Kava in Treating Major Depressive Disorder with Comorbid Anxiety: A Randomised Double-Blind Placebo-Controlled Pilot Trial. <i>Human Psychopharmacology: Clin Exp</i> <b>24</b>(1): 41-48.</p> <p>MD van Die, KM Bone, HG Burger, HJ Teede. 2009 Are we drawing the right conclusions from randomised placebo-controlled trials? <i>BioMed Central</i> <b>9</b>: 41.</p> <p>MD van Die, HG Burger, HJ Teede, KM Bone . 2009 <i>Vitex agnus-castus</i> (Chaste-tree/berry) in the Treatment of Menopause-related Complaints. <i>Journal of Alternative and Complementary Medicine</i> <b>15</b>(8): 853-862.</p> <p>J Wheat, G Currie, H Kiat, K Bone. 2009 Improving lymphatic drainage with herbal preparations: a potentially novel approach to management of lymphedema. <i>Aust J Medical Herbalism</i> <b>21</b>(3): 66-70</p> <p>C Cwikla, K Schmidt, A Matthias, KM Bone, R Lehmann, E Tiralongo. 2010 Investigations into the antibacterial activities of phytotherapeutics against <i>Helicobacter pylori</i> and <i>Campylobacter jejuni</i>. <i>Phyto Res</i> <b>24</b>(5): 649-656</p> <p>F Toselli, A Matthias, KM Bone, EM Gillam, RP Lehmann. 2010 Metabolism of the major Echinacea alkylamide N-isobutyldodeca-2E,4E,8Z,10Z-tetraenamide by human recombinant cytochrome P450 enzymes and human liver microsomes. <i>Phytother Res</i> <b>24</b>(8): 1195-1201</p> <p>Barrett B, Brown R, Rakel D, Mundt M, Bone K, Barlow S, Ewers T. 2010 Echinacea for treating the common cold: a randomized trial. <i>Ann Intern Med</i> <b>153</b>(12): 769-777.</p> <p>Bensch K, Tiralongo J, Schmidt K, , Matthias A, Bone KM, Lehmann R, Tiralongo E. 2011 Investigations into the Antiadhesive Activity of Herbal Extracts Against <i>Campylobacter jejuni</i>. <i>Phytother Res</i> <b>25</b>(8):1125-1132</p> <p>Schmidt M, Thomsen M, Bone K. 2011 Letter and Reply: Tribulus terrestris-induced nephrotoxicity? <i>Nephrol Dial Transplant</i> <b>26</b>(9):3065-3066</p>
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	<p>van Die MD, Williams SG, Emery J, Bone KM, Taylor JM, Lusk E, Pirotta MV. A Placebo-Controlled Double-Blinded Randomized Pilot Study of Combination Phytotherapy in Biochemically Recurrent Prostate Cancer. <i>Prostate</i>. 2017 May;77(7):765-775. doi: 10.1002/pros.23317. Epub 2017 Feb 9. PubMed PMID: 28181675; PubMed Central PMCID: PMC5444299.</p> <p>van Die MD, Bone KM, Emery J, Williams SG, Pirotta MV, Paller CJ. Phytotherapeutic interventions in the management of biochemically recurrent prostate cancer: a systematic review of randomised trials. <i>BJU Int</i>. 2016 Apr;117 Suppl 4:17-34. doi: 10.1111/bju.13361. Epub 2016 Feb 22. Review. PubMed PMID: 26898239.</p> <p>van Die MD, Bone KM, Williams SG, Pirotta MV. Soy and soy isoflavones in prostate cancer: a systematic review and meta-analysis of randomized controlled trials. <i>BJU Int</i>. 2014 May;113(5b):E119-30. doi: 10.1111/bju.12435. Review. PubMed PMID: 24053483.</p> <p>van Die MD, Burger HG, Teede HJ, Bone KM. Vitex agnus-castus extracts for female reproductive disorders: a systematic review of clinical trials. <i>Planta Med</i>. 2013 May;79(7):562-75. doi: 10.1055/s-0032-1327831. Epub 2012 Nov 7. Review. PubMed PMID: 23136064.</p>
<b>Research Activity</b>	Collaborative project with University of Newcastle (Prof Ron Wills) on Echinacea quality criteria and pharmacognosy (1999).
	Collaborative clinical study of herbal practice and liver toxicity (1997–1999).
:	Collaborative clinical trial on Echinacea and infection prevention (1995)
	As Director of Research and Development at MediHerb has involvement in the following research areas: clinical trials on herbal products (including projects funded by the US NIH); fundamental phytochemical research on medicinal plants; research into the pharmacokinetics of phytochemicals. A particular focus has been on the herb Echinacea.
<b>Patents:</b>	<p>Co-developed patents in several areas (assigned to commercial entities) including a herbal formulation for treating headlice (activity verified in clinical trials) and a herbal formulation for Echinacea. See examples below.</p> <p>1. Title: International (PCT) Patent Application No</p>

	<p>PCT/AU2005/000993  In the name of Mediherb Pty Ltd  For the invention entitled AN ECHINACEA FORMULATION  International Application no:  PCT/AU2005/000993  Priority Date: 07 July 2004 (07.07.2004)  Applicant: Mediherb Pty Ltd  List of Inventors: Lehmann, Reg; Bone, Kerry; Penman, Kerry; Matthias, Anita</p> <p>2. Title: A Therapeutic Composition and Method of Treatment  Australian Provisional  Patent Application No: 2004905367  Filing Date: 17 September 2004  Applicant: Mediherb Pty Ltd</p> <p>3. Title: Herbal Composition and Method of Treatment of Tension Type Headaches  Australian Provisional  Patent Application No: 2003900625  Filing Date: 12 February 2003  Applicant: Mediherb Pty Ltd</p>
<b>Professional Practice:</b>	Practitioner of herbal medicine, in Toowoomba (1985–present) and previously Brisbane (1985–1995)