

Curriculum Vitae: E. Russell Vickers

Biotechnology Website: clinicalstemcells.com

QUALIFICATIONS:

1. **Bachelor of Dental Surgery**, Faculty of Dentistry, University of Sydney (1977)
2. **Master of Dental Science** (Oral and Maxillofacial Surgery), Department of Oral and Maxillofacial Surgery, Faculty of Dentistry, University of Sydney (1992)
3. **Doctor of Philosophy**, Department of Anaesthesia and Pain Management, Faculty of Medicine, University of Sydney (2000)
4. **Graduate Diploma of Science in Medicine**, Department of Anaesthesia and Pain Management, Faculty of Medicine, University of Sydney (2000)
5. **Master of Science in Medicine** (Pain Management), Department of Anaesthesia and Pain Management, Faculty of Medicine, University of Sydney (2001)
6. **Fellow, Faculty of Pain Medicine**, Australian and New Zealand College of Anaesthetists (2000)
7. **Diploma of Herbal Medicine**, Southern Cross Herbal School, University of Newcastle (2002)
8. **Master of Art (Honours, Painting)**, College of Fine Art, University of NSW (2010)
9. **Fellow, Australian Traditional Medicine Society** (2021)

National Registrations : Australia (Dentist 1977, Specialist Oral & Maxillofacial Surgeon 1992), United Kingdom (Dental 1982) and PR China (Medical Specialist 2018), New Zealand (Specialist Oral & Maxillofacial Surgeon 2021)

Special interest: oral & maxillofacial surgery, regenerative medicine; management of pain, neuroinflammation; biotechnology

Hospital appointments 1988-2022: accredited specialist at approximately 20 major public teaching hospitals and private hospitals.

ACADEMIC TEACHING, EXAMINATION & RESEARCH

POSITIONS AND APPOINTMENTS HELD:

Current academic

- 2002- Clinical Senior Lecturer, Faculty of Medicine (University of Sydney)
 2017- Adjunct Associate Professor, University of Queensland & Charles Sturt University
 2018- Visiting Professor, Hohhot Cancer Hospital, Inner Mongolia, PR China

Previous academic

- 1987-92 Tutor / associate lecturer, Dept of Oral & Maxillofacial Surgery, Faculty of Dentistry, University of Sydney
 1996-97 Balthasar Research Scholar, Dept of Anaesthesia & Pain Management
 1998-2001 NHMRC Research Fellow, Dept of Anaesthesia & Pain Management

Hospital and Government

- 1992- Visiting Oral & Maxillofacial Surgeon, Royal North Shore Hospital
 1997- Oral & Maxillofacial Surgeon, Royal Australian Navy (Dept of Defence)
 1988-92 Registrar / senior registrar in oral & maxillofacial surgery, Sydney Hospital, United Dental Hospital, Westmead Hospital

Research expertise (basic science & clinical):

liquid chromatography, mass spectrometry, solid phase extraction, proteomics, medication and hormone chemical assays, clinical research trials, statistical analysis, stem cells, bioscaffolds

Scientific and Medical Publications: 78 publications (books, book chapters, peer reviewed publications & case reports) including Harvard University Press, Oxford University Press, Sydney University Press, Journal of Neuroscience, Journal of Human Brain Mapping, Journal of Pain Research, Journal of Stem Cell Research and Therapy, Journal of Biomaterials and Nanobiotechnology, Pharmacology and Pharmacy, Peptides, Journal of Chromatography (A & B), Open Journal of Regenerative Medicine.

1. **2022 Journal of Cancer Therapy** ER Vickers. Human adipose stem cells exposed to gamma radiation and inactivity (stasis) show increased cancer markers and DNA damage. A preliminary assessment of a pharmaceutical formulation to reverse these effects and its applications for medical radiotherapy and the space industry. 13,1. 10.4236/jct.2022.131002
2. **2022 Frontiers in Neuroimaging** J Watson, D Lukas, ER Vickers, G Galloway, CE Mountford. Case Report: Capacity to Objectively Monitor the Response of a Chronic Pain Patient to Treatment. 1 DOI=10.3389/fnimg.2022.831216
3. **2021 Journal of Cancer Therapy** ER Vickers, J Liang, PG Vickers, H Wen. Regenerative Medicine to Reduce the Side Effects from Radiotherapy Causing Skin Cancer, Fibrosis, Neuropathic Pain and Hair Loss. 12, 461-477. <https://doi.org/10.4236/jct.2021.128040>
4. **2021 Pharmacology & Pharmacy** Goh S, Goh D, Vickers E R. Clinical Assessment of a Pharmaceutical Polyphenol Fruit Extract Gel to Inhibit Dental Plaque. 12, 177-189. 10.4236/pp.2021.129016.
5. **2021 Stem Cell and Regenerative Medicine** ER Vickers, H Wen. Stem Cell and Regenerative Methods for Space Personnel. 5(2), 1-13.
6. **2020 Journal of Biomaterials and Nanobiotechnology** ER Vickers. Peptidic alginate-based hydrogels demonstrate chemotaxis and expansion to adipose tissue derived and blood derived stem cells. 11, 245-259.
7. **2020 Pharmacology & Pharmacy** ER Vickers. Natural Compound Formula RM88 Significantly Reduces Blood Alcohol Concentration in Humans. 11, 105-117.
8. **2020 Journal of Pain Research.** Mills EP, Alshelh Z, Kosanovic D, Di Pietro F, Vickers ER, Macey PM, Henderson LA. Altered Brainstem Pain-Modulation Circuitry Connectivity During Spontaneous Pain Intensity Fluctuations. 2020;13:2223-2235
9. **2020 Open Journal of Regenerative Medicine** Vickers, E. and Wen, H. (2020) Cosmetic Applications of Regenerative Medicine—A New Approach to the Reduction of Neck Lines. , 9, 36-42. doi: [10.4236/ojrm.2020.92005](https://doi.org/10.4236/ojrm.2020.92005).
10. **2020 Harvard University Press** (Elsevier) Vickers ER, Shparberg R. Systems Medicine, neuropathic oral diseases, and orofacial pain. In: Translational Systems Medicine and Oral Disease ed. Steven Sonis (Elsevier Pub.) 14; 337-351
11. **2020 Pain Management Today** (Royal Australian College of General Practitioners) ER Vickers. Natural compounds for treating pain. July, 6(1), 72-75.
12. **2019 Journal of Pain Research.** Alshelh Z, Mills EP, Kosanovic D, Di Pietro F, Macey PM, Vickers ER, Henderson LA. Effects of the glial modulator palmitoylethanolamide on chronic pain intensity and brain function. 12; 2427-2439.
13. **2018 NeuroImage: Clinical.** Alshelh Z, Di Pietro F, Mills EP, Vickers ER, Peck CC, Murray GM, Henderson LA. Altered regional brain T2 relaxation times in individuals with chronic orofacial neuropathic pain. Jan 1;19:167-73.
14. **2018 Journal of Neuroscience.** Mills EP, Di Pietro F, Alshelh Z, Peck CC, Murray GM, Vickers ER, Henderson LA. Brainstem Pain-Control Circuitry Connectivity in Chronic Neuropathic Pain. Jan 10; 38(2):465-73.
15. **2018 Human Brain Mapping.** F Di Pietro, PM Macey, CD Rae, Z Alshelh, VG Macefield, E R Vickers, LA Henderson. The relationship between thalamic GABA content and resting cortical rhythm in neuropathic pain; 39: 1945-1956.
16. **2018 Journal of Stem Cell Research and Therapy** Shparberg R, Braunsteiner N, Vickers ER, Laboratory Training Guidelines for Clinicians Undertaking Stem Cell Therapy. 8:5; 1-10.
17. **2018 NeuroImage: Clinical.** Z Alshelh, KK Marciszewski, R Akhter, F Di Pietro, EP Mills, ER Vickers Disruption of default mode network dynamics in acute and chronic pain states. 17, 222-231.
18. **2018 Open Journal of Regenerative Medicine** NE Braunsteiner, ER Vickers, R Shparberg. Psychological Issues for Patients Undergoing Stem Cell Therapy and Regenerative Medicine 2018, 7, 1-17.
19. **2018 Australian Endodontic Journal** NE Braunsteiner, ER Vickers, B Toole, J Braunsteiner. Psychosocial factors and addiction in chronic orofacial pain. 44, 148-158.

20. **2018 Australian Endodontic Journal** R Shparberg, ER Vickers. Cell based therapies and natural compounds for pain. 44; 186-94.
21. **2017 Journal of Arthritis** ER Vickers. Iatrogenic resorption of a mandibular condyle following 3rd molar wisdom tooth surgery, 6:4
22. **2017 Orofacial Pain (Wiley Pub)** ER Vickers, AJ Moule. Referral strategies for orofacial pain cases. In Moule, Alexander J. and Hicks, M. Lamar (Ed.), *Diagnosing Dental and Orofacial Pain: A Clinical Manual* (pp. 130-132) Chichester, West Sussex, United Kingdom: John Wiley & Sons.
23. **2017 Orofacial Pain (Wiley Pub)** ER Vickers, AJ Moule. (2017). Diagnosing neuropathic orofacial pain. In Moule, Alexander J. and Hicks, M. Lamar (Ed.), *Diagnosing Dental and Orofacial Pain: A Clinical Manual* (pp. 123-129) Chichester, West Sussex, United Kingdom: John Wiley & Sons.
24. **2017 Hair Therapy and Transplantation Vickers ER** An Analysis of the Safety and Efficacy of Topical Zinc-Thymulin to treat Androgenetic Alopecia. 7:147.
25. **2016 Journal of the Australian Society of Cosmetic Chemists** ER Vickers. The Science of Beauty, 2016. Stem Cells and cosmetic science. 2016; 6(1) August; 29-42.
26. **2016 Journal of Neuroscience**. E Alshelhi, F Di Pietro, A Youssef, J Reeves, P Macey, ER Vickers, C Peck, G Murray, L Henderson. Chronic neuropathic pain: it's about the rhythm. 36(3):1008-1018
27. **2015 Medicine Today** (Journal of the Royal Australian College of General Practitioners) Vickers ER. Neuropathic orofacial pain: Diagnosis and multimodal management. 2015, 16(9), 16-24.
28. **2015 Open Journal of Dentistry and Oral Medicine** Vickers ER, Woodcock KL. Raspberry leaf herbal extract significantly reduces pain and inflammation in oral lichen planus patients – a case series analysis. 2015, 3(3), 73 – 81.
29. **2014 Journal of Pain Research** Vickers ER, Karsten E, Flood J, Lilischkis R. (2014). A preliminary report on stem cell therapy for neuropathic pain in humans.
30. **2010 Journal of Oral Pathology and Medicine**. Cox S, Vickers ER, Ghu S, Zoellner H. (2010). Salivary arecoline levels during areca nut chewing in human volunteers. 39(6):465-9.
31. **2009 Oxford University Press**. Vickers ER, Zakrzewska J. History and examination for orofacial pain (In *Orofacial Pain*, editor J Zakrzewska, Oxford University Press.
32. **2009 Oxford University Press**. Vickers ER, Zakrzewska J. Dental causes of orofacial pain (In *Orofacial Pain*, editor J Zakrzewska, Oxford University Press.
33. **2007 Australian Government Press**. ER Vickers. Therapeutic Guidelines: Oral and Dental. Version 1. Therapeutic Guidelines Limited Australian Government and the Australian Dental Association.
34. **2007 Realities Clinique (France)**. ER Vickers, Y Boucher. Diagnosis of idiopathic orofacial pain: atypical facial pain, atypical odontalgia.
35. **2007 Realities Clinique (France)** ER Vickers, Y Boucher (2007). Treatment of idiopathic orofacial pain: atypical facial pain, atypical odontalgia. *Realities Clinique (France)*
36. **2006 Journal of the Japan Society for Analytical Chemistry**. ER Vickers, C Goebel, L Mather, L Mackay, R Wells (2006) *Analytical sciences* 14 (4), 827-830.
37. **2006 Australian Dental Journal**. Vickers ER, Boocock H, Harris RD, Bradshaw J, Cooper M, Vickers P, Cannon P. (2006) Analysis of the acute postoperative pain experience following oral surgery: identification of 'unaffected', 'disabled' and 'depressed, anxious and disabled' patient clusters. 51: 69-77.
38. **2006 IASP Press**. Zakrzewska JM, Woda A, Stohler CS, Vickers ER. Classification, diagnosis and outcome measures in patients with orofacial pain. *Proceedings of the 11th World Congress on Pain* Ed. Flor H., Kalso E., Dostrovsky J.O. 745- 754.
39. **2005 Australian Dental Journal**. Vickers ER, Boocock H. (2005). Chronic orofacial pain is associated with psychological morbidity and negative personality changes: a comparison to the general population. 50: 21-30.
40. **2005 Journal of Chromatography B**. CJ Hogg, ER Vickers, TI Rogers. Determination of testosterone in saliva and blow of bottlenose dolphins (*Tursiops truncatus*) using liquid chromatography-mass spectrometry. *Analytical Technologies in the Biomedical and Life Sciences*. 814, 339-346.
41. **2005 CRC Handbook of Marine Mammal Medicine**. CJ Hogg, ER Vickers, TI Rogers.
42. **2005 Sydney University Press**. ER Vickers *Orofacial Pain: Problem Based Learning*. Book. The Scope of the Problem.
43. **2005 Sydney University Press** ER Vickers. Psychosocial factors in orofacial pain.

44. **2005 Sydney University Press** ER Vickers. The molecular and clinical progression of pain.
45. **2005 Sydney University Press** ER Vickers. Temporomandibular disorder.
46. **2005 Sydney University Press** ER Vickers. Neuropathic pain.
47. **2005 Sydney University Press** ER Vickers. Neuropathic Facial Pain, Burning Mouth Syndrome, Trigeminal Neuralgia
48. **2004 Journal of Chromatography A.** Cox S, Piatkov I, Vickers ER, Ma G. High-performance liquid chromatographic determination of arecoline in human saliva. 2;1032(1-2):93-5.
49. **2001 Journal of Chromatography B.** Vickers ER, Goebel C, Mather LE, Mackay L, Wells RJ (2001). High-performance liquid chromatographic determination of bradykinin in saliva: a critical review and a new method. 755: 101-110.
50. **2001 Anaesthesia Review.** Brooker C, Vickers ER. Orofacial Pain.
51. **2001 Medicine Today.** ER Vickers, Reply to Dr J. Heywood, re: "Facial pain – a biopsychosocial problem". Medicine Today 2: 149-151.
52. **2000 Medicine Today.** Vickers ER, Cousins M, Nicholas M (2000). Facial pain – a biopsychosocial problem. 11: 42-48.
53. **2000 Australian Endodontic Journal.** Vickers ER, Cousins M. Neuropathic orofacial pain. Part 1: Prevalence and pathophysiology. 26: 19-26.
54. **2000 Australian Endodontic Journal.** Vickers ER, Cousins M (2000). Neuropathic orofacial pain. Part 2: Diagnostic procedures, treatment guidelines and case reports. 26: 53-63.
55. **2000 Peptides.** Goebel C, Mackay LG, Vickers ER, Mather LE (2000). Determination of defensin HNP-1, HNP-2, and HNP-3 in human saliva by using LC/MS. 21: 757-765.
56. **2001 Medical Observer.** Vickers ER. Paget's disease. Case report. 9 February: 40.
57. **2001 Medical Observer.** Vickers ER. Leukoplakia and candidiasis. Case report. 16 February: 38.
58. **2001 Medical Observer.** Vickers ER Torus palatinus. Case report. 2 March: 50.
59. **2001 Medical Observer.** Vickers ER Oral ulceration. Case report. 11 May: 48-49.
60. **2001 Medical Observer.** Vickers ER Hairy tongue. Case report. (June)
61. **2000 Medical Observer.** Vickers ER Oral infections. Feb: 46-47.
62. **2000 Australian Endodontic Journal.** Parashos P, Vickers ER. Atypical odontalgia – case report. 26: 121-123.
63. **2001 Sydney University.** ER Vickers. Diagnosis and management of neuropathic orofacial pain (MScMed thesis University of Sydney)
64. **2000 Sydney University.** ER Vickers (2000) Clinical and pharmacological studies of chronic orofacial pain (PhD thesis University of Sydney)
65. **1999 Medical Observer.** Vickers ER, Cousins MJ. Case study of medical student with neuropathic pain: diagnostic and treatment guidelines. Jan: 25.
66. **1999 Medical Observer.** Vickers ER, Rix L. A synopsis of oral pathology. April: 58-59.
67. **1998 Analytical Sciences: International Journal of the Japan Society for Analytical Chemistry.** ER Vickers, C Goebel, LE Mather, L Mackay, R Wells 14 (4), 827-830.
68. **1998 Australian Dental Journal.** Vickers ER, Cousins M, Woodhouse A (1998). Pain description and severity of chronic orofacial pain conditions. 43: 403-409.
69. **1998 Oral Surgery, Oral Medicine, Oral Pathology, Oral Radiology & Endodontics.** Vickers ER, Cousins M, Walker S, Chisholm K. Analysis of 50 patients with atypical odontalgia: a preliminary report on pharmacological procedures for diagnosis and treatment. 85: 24-32.
70. **1998 Oral Surgery, Oral Medicine, Oral Pathology, Oral Radiology & Endodontics.** ER Vickers. Reply to Dr Greenberg, re: "Atypical odontalgia" 85; 628-629.
71. **1997 Anesthesia Progress.** Vickers ER, Marzbani N, Gerzina TM, McLean C, Punnia-Moorthy A, Mather L. Pharmacokinetics of 5% EMLA cream application to oral mucosa. 44: 32-37.
72. **1995 Australian Family Physician.** ER Vickers, M Cousins. Management of chronic orofacial pain. 01/1995; 23(12).
73. **1994 General Practitioner.** Vickers ER, Cousins M. Temporomandibular Disorders. 20: 24-25
74. **1994 Australian Family Physician.** Vickers ER, Cousins M (1994). Management of chronic orofacial pain. 20: 2315-2321.
75. **1993 Quintessence International.** Vickers ER, Punnia-Moorthy A. Pulpal anesthesia from a eutectic topical anesthetic. 24: 547-551.

76. **1992 Australian Dental Journal.** Vickers ER, Punnia-Moorthy A. A clinical evaluation of three topical anaesthetic agents. 37: 266-270.
77. **1992 Australian Dental Journal.** Sved AM, Wong JD, Donkor P, Horan J, Rix L, Curtin J, Vickers ER. Complications associated with maxillary nerve block anaesthesia via the greater palatine canal. 37: 340-345.
78. **1991 Sydney University.** ER Vickers. Evaluation of a eutectic topical anaesthetic (MDSc thesis, University of Sydney)

Conference proceedings and scientific abstracts:

- ~ 50 lectures at international and national meetings as a keynote or plenary lecturer
- ~ 100 lectures at state and metropolitan level as an invited lecturer
- ~ 50 scientific abstracts presented at conferences

Journal reviewer:

- Anaesthesia and Analgesia
- Journal of Orofacial Pain
- Journal of Psychosomatic Medicine
- International Endodontic Journal