Curriculum Vitae

Timothy Bede Chaston

Summary

- 15 high ranking journal publications and a monograph,
- 7 years of biomedical laboratory and teaching experience,
- 10 years of scientific and medical writing experience,
- 8 years of presentations at international conferences,
- Medical, pharmaceutical and academic work history.

Employment History

2006 – 2009

Postdoctoral research associate; King's College London, London UK.

Laboratory

Project management, animal handling, cell culture, PCR, immunohistochemistry, confocal microscopy, western blotting, ELISA, micro array, promoter analysis and assay, and radioactive isotope assays.

Data analysis

Analysis of variance, t-test, non parametric tests, Chi squared, F-test, exponents, logarithms, quadratic equations, and permutations.

Communication

Undergraduate lecturing, publication and abstract writing, grant application writing, oral presentations at international conferences.

2005 – 2006

Medical writer; Centre for Obesity Research and Education, Monash University, Melbourne Australia.

Literature

Systematic and exhaustive retrieval of relevant journal publications, tabulation and meta-analysis of data.

Data analysis

Analysis of variance, t-test, non parametric analysis, Chi squared, frequency distributions, analysis of variance, correlation techniques, sampling theory, factor analysis, extensive use of SPSS statistical software.

Communication

Graphical representation of data, medical writing, abstract writing preparation of educational materials, oral presentations at conferences, publication planning and preparation.

2004 – 2005

Technical writer; Mayne Pharmaceuticals, Melbourne Australia.

Preparation and cyclical review of SOP's and OI's conforming to prescribed style and format.

2004, 2006

Contract Scientific Writer;
Holding Redlich Law firm: Systematic literature review of stress related CVD outcomes.
ESH connect inc: Literature review of industrial pollutants and health risks.

2001 – 2004

PhD Student; University of New South Wales, Sydney Australia.

Laboratory

Project management, cell culture, PCR, western blotting, radioactive isotope assays, chemical assays, DNA manipulation.

Data analysis

Analysis of variance, t-test, exponents, logarithms, quadratic equations, and permutations.

Communication

Publication and abstract writing, oral presentations at international conferences, presentation of results to directors of funding bodies.

2000 - 2001

Store Manager; Heart Research Institute, Sydney Australia.
Management of all laboratory consumables, tissue culture facilities, general scientific needs.

Education

Bachelor of Applied Science (BAppSci):

Environmental and Analytical Chemistry, University of Canberra. 1999

Doctor of Philosophy (PhD):

Iron Metabolism and Chelation Program, Childrens Cancer Institute Australia for Medical Research. Department of Paediatrics, University of New South Wales. 2004

Publications:

TB Chaston, P Matak , K Pourvali, SK Srai, AT McKie, PA Sharp. (2011) *Am J Physiol Cell Physiol.*

Hypoxia inhibits hepcidin expression in HuH7 hepatoma cells via decreased SMAD4 signaling.

SK Srai, B Chung, J Marks, K Pourvali, N Solanky, C Rapisarda, TB Chaston, R Hanif, RJ Unwin, ES Debnam, PA Sharp. (2010) *Kidney Int. Oct;78(7):660-7.*

Erythropoietin regulates intestinal iron absorption in a rat model of chronic renal failure.

TB Chaston and DR Richardson 2009. Verlag Dr Muller publishing. ISBN: 978-3-639-14780-3.

Cytotoxic Mechanisms of Iron Chelators with Therapeutic Potential.

B Chung, T Chaston, J Marks, SK Srai, PA Sharp. (2009) *J Nutr.Aug;139(8):1457-62.*

Hepcidin decreases iron transporter expression in vivo in mouse duodenum and spleen and in vitro in THP-1 macrophages and intestinal Caco-2 cells.

P Matak, TB Chaston, B Chung, SK Srai, AT McKie, PA Sharp. (2009) *Haematologica. Jun;94(6):773-80.*

Activated macrophages induce hepcidin expression in HuH7 hepatoma cells.

TB Chaston, JB Dixon. (2008) *Int J Obes (Lond). 32(4):619-28.*

Factors associated with percent change in visceral versus subcutaneous abdominal fat during weight loss: findings from a systematic review.

T Chaston, B Chung, M Mascarenhas, J Marks, B Patel, SK Srai, P Sharp. (2008) *Gut. 57(3):374-82.*

Evidence for differential effects of hepcidin in macrophages and intestinal epithelial cells.

VP Alvarez, JB Dixon, BJ Strauss, CP Laurie, TB Chaston, PE O'Brien. (2007) *Obes Surg. Feb;17(2):211-21*

Single frequency bioelectrical impedance is a poor method for determining fat mass in moderately obese women.

PE O'Brien, T McPhail, TB Chaston and JB Dixon. (2006) *Obesity Surgery*

Systematic review of medium term weight loss after bariatric procedures.

TB Chaston, JB Dixon and PE O'Brien. (2006) *International Journal of Obesity*

Changes in fat free mass during significant weight loss: a systematic review.

TB Chaston, RN Watts, J Yuan, and DR Richardson. (2004) *Clinical Cancer Research* 10(21):7365-74.

The Potent Anti-Tumor Activity of Novel Iron Chelators Derived from Di-2-Pyridylketone Isoicotinoyl Hydrazone Involves Fenton-Derived Free Radical Generation.

PV Bernhardt, LM Caldwell, TB Chaston, P Chin and DR Richardson. (2003) *Journal of Biological and Inorganic Chemistry* 8:866-880.

Cytotoxic iron chelators: characterisation of the structure, solution chemistry and redox activity of ligands and iron complexes of the di-2-pyridyl ketone isonicotinoyl hydrazone (HPKIH) analogues.

TB Chaston and DR Richardson. (2003) *American Journal of Hematology* 73:200-210.

Iron Chelators for the Treatment of Iron Overload Disease: Relationship Between Structure, Redox Activity, and Toxicity.

TB Chaston and DR Richardson. (2003) *Journal of Biological and Inorganic Chemistry* 8:427-438.

Interactions of the pyridine-2-carboxaldehyde isonicotinoyl hydrazone class of chelators with iron and DNA: implications for toxicity in the treatment of iron overload disease.

TB Chaston, DB Lovejoy, RN Watts, DR Richardson. (2003) *Clinical Cancer Research* 9:402-414.

Examination of the Antiproliferative Activity of Iron Chelators: Multiple Cellular Targets and the Different Mechanisms of Action of Triapine Compared with Desferrioxamine and the Potent Pyridoxal Isonicotinoyl Hydrazone Analogue 311.

TB Chaston and BA Lidbury. (2001) *Immunology and Cell Biology* 79:62-64.

Genetic 'budget' of viruses and the cost to the infected host: A theory on the relationship between the genetic capacity of viruses, immune evasion, persistence and disease.

Oral Presentations at International Conferences

BioIron 2001 Cairns, Australia
Title: Therapeutic Iron Chelators of the PCIH Class do not Promote Fenton Chemistry.

Australian Society for Medical Research 2002 Sydney, Australia
Title: Therapeutic Iron Chelators of the PCIH class: Redox Activity and DNA Binding Properties.

Biometals and Antioxidants in Health and Disease 2002 Monastir, Tunisia
Title: The Potential of Iron Chelators in the Treatment of Friedreichs Ataxia.

Mutagenesis and Experimental Pathology Society of Australasia 2003 Hobart, Australia
Title: The Iron Chelators 311 and Triapine exert Antineoplastic Effects via Different Mechanisms.

Friedreichs Ataxia Research Alliance 2003 Bethesda, USA
Title: Iron Chelators have Potential in the Treatment of Friedreich's Ataxia.

International Congress on Obesity 2006 Sydney Australia
Title: Changes in fat free mass during significant weight loss: A systematic review.

BioIron 2007 Kyoto, Japan
Title: Evidence for differential effects of hepcidin in macrophages and intestinal epithelial cells.

Cambridge Physiological Society Congress 2008, Cambridge, UK
Title: Mouse duodenal iron transport is decreased following chronic exposure to hepcidin.

European Iron Club 2008, St Gallen, Switzerland
Title: Activated macrophages induce hepatic hepcidin expression by secreting IL-1β.