CURRICULUM VITAE – MICHAEL FENECH - 2016

EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE & POST-DOC	YEAR(s)	FIELD OF STUDY
Flinders University (South Australia)	Ph.D.	1980-84	Genetic Toxicology
Flinders University (South Australia)	Post-doctoral	1985-88	Genetic Toxicology
Medical Research Council (United Kingdom)	Post-doctoral	1989-1990	Molecular Genetics

Positions and Employment

1985-1987 Research Associate, Flinders Medical Centre Bedford Park, South Australia.
1987-1989 Post-doctoral Fellow at the MRC Cell Mutation Unit, University of Sussex, UK.
1989-1990 Research Scientist, Australian Nuclear Science & Technology Organisation, Sydney, Australia..
1991-1998 Research Scientist, at CSIRO, Division of Human Nutrition, Adelaide, Australia.
1998-2003 Principal Research Scientist, at CSIRO, Division of Human Nutrition, Adelaide, Australia.
2003-present Senior Principal Research Scientist, at CSIRO Health and Biosecurity, Adelaide, Australia.

Other Experience and Professional Memberships

1997-present Chair, and co-founder of the HUMN project on micronucleus frequency in humans (www.humn.org)
2009-present Current Chair and co-founder of Micronutrient Genomics Project (www.micronutrientgenomics.org/)
2014 President/Organiser of the 8th Congress of the International Society of Nutrigenetics/Nutrigenomics

Honours

- 1988 Research Training Fellowship awarded by the International Agency for Research on Cancer (WHO, Lyon, France) for molecular genetics training at the MRC Cell Mutation Unit, Sussex, UK for 12 months.
- 1991International Cancer Research Technology Transfer award by the International Union against Cancer for collaborative research and training with the 32P-postlabelling adduct assay at the University of Kentucky USA..
- 2007 Awarded the prestigious Flinders University Convocation Medal for outstanding national and international academic achievement in the field of environmental health and nutrition by a Flinders University graduate.
- 2008 Received the Alexander Hollaender Award of the Environmental Mutagen Society (USA). The prestigious Alexander Hollaender Award is conferred annually in recognition of outstanding contributions in the application of the principles and techniques of environmental mutagenesis to the protection of human health.
- 2008 Conferred the honorary academic title of Adjunct Professor by the University of South Australia in recognition of significant academic contribution to the School of Pharmacy and Medical Sciences.
- 2010 Awarded the position of Visiting Professor at Taipei Medical University, Taiwan.
- 2011 Conferred the honorary academic title of Professorial Fellow at Flinders University of South Australia.
- 2012 Awarded Honorary Fellowship of the Australian College of Nutritional and Environmental Medicine for his leadership and contributions to environmental and nutritional genomic sciences internationally.
- 2013 Awarded the Honorary academic title of Affiliate Professor by the University of Adelaide.
- 2013 Elected President of the 8th Congress of the International Society of Nutrigenetics/Nutrigenomics
- 2014 Elected Foundation President of the Asia-Pacific Nutrigenomics and Nutrigenetics Organisation
- 2014 Elected member of the Expert Panel on Natural Sciences for Singapore's National Research Foundation Competitive Research Programme managed by the Prime Minister's Office.
- 2015 16th John M Kinney Nestlé-Nutrition Award for the paper *Plasma micronutrient levels and telomere length in children*, published in Nutrition 31 (2015) 331–336.
- 2016 elected *Inaugural DSM Scholar-in-Residence in Micronutrient Deficiency Prevention and Control* at the Bloomberg School of Public Health, at the Johns Hopkins University, USA.

Key Research interest is to understand how environmental factors affect the integrity of the human genome at the chromosomal, telomere and mitochondrial DNA level. This interest stems from the fact that harm to the human genome is the most fundamental pathology causing developmental and degenerative diseases including accelerated ageing. More recently he has also focused his research on personalized nutritional prevention of (i) DNA damage across all life-stages, (ii) cancer growth in cancer survivors, (iii) neurodegenerative disorders such as Mild Cognitive Impairment and Alzheimer's disease and (iv) automated high content diagnostics of DNA damage biomarkers.

Publication Achievements:
Published more than 300 papers 80% as main author in international peer-reviewed journals in the fields of genetic toxicology, radiation biology, nutrition, nutrigenomics, nutrigenetics and degenerative diseases of ageing. Citations per annum increased from 1369 in 2011 to 1509 in 2015**.** His Reuters-Thomson ISI H-index in August 2016 was 58 and total number of citations was 15,119 (13,419 without self-citations), with an average of 51.3 citations per publication. His Google Scholar H-index is 71 with a total of 23,434 citations**. As of March 2016, three papers that he authored as principal author (listed below) received enough citations to place them in the top 1% of their academic field based on a highly cited threshold for the field and publication year (source Pub Med):**

(i) Fenech, M et al Molecular mechanisms of micronucleus, nucleoplasmic bridge and nuclear bud formation in mammalian and human cells. Mutagenesis 26(1) 125-132; 2011
(ii) Bonassi, S et al, Fenech, M. An increased micronucleus frequency in peripheral blood lymphocytes predicts the risk of cancer in humans. Carcinogenesis 28(3); 625-63; 2007.
(iii) Fenech, M. Cytokinesis-block micronucleus cytome assay. Nature Protocols 2(5):1084-1104. 2007.

Three earlier papers have each been cited more than 1000 times in Google Scholar:
1: Fenech M, Morley AA. Measurement of micronuclei in lymphocytes. Mutat Res. 1985 Feb-Apr;147(1-2):29-36.
2: Fenech M. The in vitro micronucleus technique. Mutat Res. 2000 Nov 20;455(1-2):81-95.
3. Fenech M. et al Human MicronNucleus project. HUMN project: detailed description of the scoring criteria for the cytokinesis-block micronucleus assay using isolated human lymphocyte cultures. Mutat Res. 2003 Jan 10;534(1-2):65-75.

International Recognition and Impacts since 2007:

(i) 2007, **World Cancer Research Fund** invitation to review chapter on "Mechanism of Cancer Initiation" in the WCRF 2007 expert report titled "Food, nutrition, physical activity and the prevention of cancer: a global perspective".
(ii) 2008, The Genome Health Clinic concept he conceived gained recognition internationally and resulted in the foundation of an Australian company called **Reach100** which is now exporting its services globally;
(iii) 2010 the **OECD** officially adopted the in vitro cytokinesis-block micronucleus assay he developed for in vitro genetic toxicology testing as test guideline # 487; all pharmaceuticals or cosmetics are now required to pass this test prior to being allowed for use in humans.
(iv) 2011 The **International Atomic Energy Agency** adopted the cytokinesis-block micronucleus (CBMN) assay he developed for its ***Cytogenetic Dosimetry Manual*** (published September 2011). The CBMN assay is now used world-wide for radiation exposure biodosimetry in the event of a radiation accident.
(v) 2011 he was invited to join the **Folate Expert Panel** of the Biomarkers of Nutrition for Development (BOND) Program at the **USA NIH National Institute of Child Health and Human Development.**
(vi) 2011 He was invited to be **Guest Editor for 25th Anniversary Issue of the international journal *Mutagenesis*** on the topic of "Micronuclei – Recent advances in their measurement, in understanding of molecular mechanisms, and their association with environment, genetics and disease".
(vii) 2013 Elected Associate Editor of the ***Journal of Nutrigenetics/Nutrigenomics***.
(viii) 2014 Elected member of the editorial board of the international journal ***Telomeres and Telomerase***
(ix) 2015 Elected Editorial board member of the journal ***Nutrients***
(x) 2015 Invited as **Guest Editor for a special issue of Mutation Research Reviews** on the use the lymphocyte micronucleus assay for detection of DNA damage induced by *in vivo* exposure to chemical genotoxins
(xi) 2016 Invited to be the ***Inaugural DSM Scholar-in-Residence in Micronutrient Deficiency Prevention and Contro***l at the Johns Hopkins Bloomberg School of Public Health, USA.

Leadership:

He is internationally recognized as an effective and visionary leader in breakthrough science in the fields of environmental and nutritional genomics. His nationally and internationally recognized achievements as a science leader include:

- Invention and development of DNA damage diagnostics that have now become gold standards in the fields of environmental and nutritional genomics and used world-wide.

- International harmonization of micronucleus assays to measure DNA damage in human populations via the HUMN project which he co-founded and leads since 1997 involving coordination/collaboration of more than 33 laboratories world-wide (www.humn.org). The HUMN project is recognized internationally as a benchmark of cooperative research in the field of environmental genomics. Many of the most highly cited papers in this field originate from HUMN project activities.

- His concept of the Genome Health Clinic and its translation into practice via Reach100 which is now being accepted and recognized world-wide via major investments from overseas (China, Qatar).

- He is current chair of the international Micronutrients Genomics Project an international initiative aimed at defining the nutrigenetic and nutrigenomic aspects of the bioavailability and bioefficacy of each micronutrient.

- The importance of his concept of Dietary Reference Values based on DNA damage prevention is now recognised internationally by invitations to organize and chair a session on this topic at the *IUNS 20th International Congress of Nutrition* held in Granada from September 15th - 20th, 2013 and give two presentations related to this topic at the *Micronutrient Forum* in June 2014 in Addis Ababa.

The Nutrigenomics and DNA Damage diagnostics group he leads at CSIRO is recognized internationally as one of the best laboratories in the fields of nutritional and environmental genomics as indicated by the high impact publications and invitations to speak nationally and internationally. Both in terms of publications and impact in the public health arena the outputs of this group are amongst the best in CSIRO, nationally and internationally.

Over the past 10 years he successfully led research teams ranging in size from between 12-30 staff including research scientists, research project officers and students at CSIRO both as stream leader and theme leader.

Invitations to Conferences:
He is regularly invited to speak at science meetings; for example since 2011 he was invited to speak at 49 international (6 keynote or plenary lectures) and 20 national meetings in the fields of nutrition, genetic toxicology, radiation biology and nutritional genomics/genetics. Invitations to speak in 2014-2016 include:

- 8th Congress of the International Society of Nutrigenetics/Nutrigenomics, Australia, 1-2 May 2014
- 4th Science of Nutrition in Medicine Conference, Gold Coast Australia, 2-3 May 2014
- Micronutrient Forum, 2-6 June, Addis Ababa Ethiopia (2 invited lectures)
- Nutrition Society & Dietitians Association (Australia) Nutrigenomics meeting, 31 July, Sydney
- 45th Meeting of Environmental Mutagenesis and Genomics Society September 13–17, Florida, USA
- Korean Nutrition Society Annual Conference "Brain and Nutrition". Jeju-Island, 5-7 Nov 2014
- Australian Health and Medical Research Congress, Melbourne from 16-19 November 2014
- 4th Asian Conference on Environmental Mutagens, Kolkata, India, December 10 – 12, 2014
- International Conference in Mutagenesis and Anti-Mutagenesis, Vienna, Austria 17-20 February 2015
- 12th Asia Congress of Nutrition meeting, Yokohama, Japan, 14-18 May, 2015, (Plenary lecture)
- International Atomic Energy Agency, Biodosimetry Technical meeting, Japan, 14-18 September 2015
- 14th International Worshop on Radiation and DNA Damage, Melbourne, 21-24 March 2016
- 4th International Vitamin Conference, Copenhagen, 24-27 May, 2016 (Keynote lecture)

External Funding support since 2007: $4,101,000 funding from NIH, NHMRC, Cancer Council Australia and various Food Industry bodies.

Publications past 5 years

#	Reference	Impact factor
1.	Barden A, O'Callaghan N, Burke V, Mas E, Beilin LJ, **Fenech M**, Irish AB, Watts GF, Puddey IB, Huang RC, Mori TA. n-3 Fatty Acid Supplementation and Leukocyte Telomere Length in Patients with Chronic Kidney Disease. Nutrients. 2016 Mar 19;8(3). pii: E175. doi: 10.3390/nu8030175. PubMed PMID: 27007392.	3.3

2.	Alimba CG, Dhillon V, Bakare AA, **Fenech M**. Genotoxicity and cytotoxicity of chromium, copper, manganese and lead, and their mixture in WIL2-NS human B lymphoblastoid cells is enhanced by folate depletion. Mutat Res Genet Toxicol Environ Mutagen. 2016 Mar;798-799:35-47. doi: 10.1016/j.mrgentox.2016.02.002. Epub 2016 Feb 20. PubMed PMID: 26994492.	2.4
3.	François M, **Fenech MF**, Thomas P, Hor M, Rembach A, Martins RN, Rainey-Smith SR, Masters CL, Ames D, Rowe CC, Lance Macaulay S, Hill AF, Leifert WR, The Australian Imaging Biomarkers And Lifestyle Study Research Group. High content, multi-parameter analyses in buccal cells to identify Alzheimer's disease. Curr Alzheimer Res. 2016 Mar 15. [Epub ahead of print] PubMed PMID: 26975368.	3.9
4.	François M, Leifert WR, Tellam R, **Fenech MF**. Folate deficiency and DNA-methyltransferase inhibition modulate G-quadruplex frequency. Mutagenesis. 2016 Jan 11. pii: gev088. [Epub ahead of print] PubMed PMID: 26758645.	2.8
5.	Bolognesi C, Bonassi S, Knasmueller S, **Fenech M**, Bruzzone M, Lando C, Ceppi M. Clinical application of micronucleus test in exfoliated buccal cells: A systematic review and metanalysis. Mutat Res Rev Mutat Res. 2015 Oct-Dec;766:20-31.	6.2
6.	Siddiqui MS, François M, **Fenech MF**, Leifert WR. Persistent γH2AX: A promising molecular marker of DNA damage and aging. Mutat Res Rev Mutat Res. 2015 Oct-Dec;766:1-19.	6.2
7.	Bailey LB, Stover PJ, McNulty H, **Fenech MF**, Gregory JF 3rd, Mills JL, PfeifferCM, Fazili Z, Zhang M, Ueland PM, Molloy AM, Caudill MA, Shane B, Berry RJ,Bailey RL, Hausman DB, Raghavan R, Raiten DJ. Biomarkers of Nutrition for Development-Folate Review. J Nutr. 2015 Jul;145(7):1636S-1680S.	3.9
8.	Leifert WR, Nguyen T, Rembach A, Martins R, Rainey-Smith S, Masters CL, Ames D, Rowe CC, Macaulay SL, François M, **Fenech MF**; Australian Imaging, Biomarkers and Lifestyle Study Research Group. Buccal Cell Cytokeratin 14 Correlates with Multiple Blood Biomarkers of Alzheimer's Disease Risk. J Alzheimers Dis. 2015;48(2):443-52.	4.2
9.	Lee SL, Thomas P, **Fenech M.** Genome instability biomarkers and blood micronutrient risk profiles associated with mild cognitive impairment and Alzheimer's disease. Mutat Res. 2015 Jun;776:54-83.	3.7
10.	Singh MD, Thomas P, Owens J, Hague W, **Fenech M**. Potential role of folate in pre-eclampsia. Nutr Rev. 2015 Oct;73(10):694-722.	6.1
11.	Yin H, Casey PS, McCall MJ, **Fenech M**. Size-dependent cytotoxicity and genotoxicity of ZnO particles to human lymphoblastoid (WIL2-NS) cells. Environ Mol Mutagen. 2015 Dec;56(9):767-76.	2.6
12.	Thomas P, **Fenech M**. Buccal Cytome Biomarkers and Their Association with Plasma Folate, Vitamin B12 and Homocysteine in Alzheimer's Disease. J Nutrigenet Nutrigenomics. 2015;8(2):57-69.	2.2
13.	Minihane AM, Vinoy S, Russell WR, Baka A, Roche HM, Tuohy KM, Teeling JL, Blaak EE, **Fenech M,** Vauzour D, McArdle HJ, Kremer BH, Sterkman L, Vafeiadou K, Benedetti MM, Williams CM, Calder PC. Low-grade inflammation, diet composition and health: current research evidence and its translation. Br J Nutr. 2015 Oct 14;114(7):999-1012.	3.5
14.	Milne E, Greenop KR, Ramankutty P, Miller M, de Klerk NH, Armstrong BK, Almond T, O'Callaghan NJ, **Fenech M**. Blood micronutrients and DNA damage in children. Mol Nutr Food Res. 2015 Oct;59(10):2057-65.	4.6
15.	François M, Leifert W, Tellam R, **Fenech M**. G-quadruplexes: A possible epigenetic target for nutrition. Mutat Res Rev Mutat Res. 2015 Apr-Jun;764:101-7.	6.2
16.	Chua A, Thomas P, Clifton P, **Fenech M**. Chromosomal DNA damage in APOE ε4 carriers and noncarriers does not appear to be different. Environ Mol Mutagen. 2015 Oct;56(8):694-708	2.6
17.	Bolognesi C, Roggieri P, Ropolo M, Thomas P, Hor M, **Fenech M**, Nersesyan A, Knasmueller S. Buccal micronucleus cytome assay: results of an intra- and inter-laboratory scoring comparison. Mutagenesis. 2015 Mar 20. pii: gev017. [Epub ahead of print]	3.5
18.	Sharif R, Thomas P, Zalewski P, **Fenech M**. Zinc supplementation influences genomic stability biomarkers, antioxidant activity and zinc transporter genes in an elderly Australian population with low zinc status. Mol Nutr Food Res. 2015 Mar 9. doi: 10.1002/mnfr.201400784. [Epub ahead of print]	4.9
19.	Bull C, Christensen H, **Fenech M**. Cortisol is not associated with telomere shortening or chromosomal instability in human lymphocytes cultured under low and high folate conditions. PLoS One. 2015 Mar 6;10(3):e0119367. doi: 10.1371/journal.pone.0119367	3.5
20.	Leifert WR, Tuli JF, Francois M, Nguyen T, Rembach A, Rumble RL, Rainey-Smith S, Martins R, **Fenech MF**. Buccal Cell Cytokeratin 14 Identifies Mild Cognitive Impairment and Alzheimer' s Disease in the AIBL Study of Aging. Curr Alzheimer Res. 2015;12(3):233-41	3.8
21.	Milne E, O'Callaghan N, Ramankutty P, de Klerk NH, Greenop KR, Armstrong BK, Miller M, **Fenech M**. Plasma micronutrient levels and telomere length in children. Nutrition. 2015 Feb;31(2):331-6.	3.2
22.	Siddiqui MS, François M, **Fenech MF**, Leifert WR. γH2AX responses in human buccal cells exposed to ionizing radiation. Cytometry A. 2015 Apr;87(4):296-308.	3.1
23.	François M, Hochstenbach K, Leifert W, **Fenech MF**. Automation of the cytokinesis-block micronucleus cytome assay by laser scanning cytometry and its potential application in radiation biodosimetry. Biotechniques. 2014 Dec 1;57(6):309-12.	2.7
24.	Nersesyan A, Kundi M, **Fenech M,** Bolognesi C, Misik M, Wultsch G, Hartmann M,Knasmueller S. Micronucleus	7.3

	assay with urine derived cells (UDC): a review of its application in human studies investigating genotoxin exposure and bladder cancer risk. Mutat Res Rev Mutat Res. 2014 Oct-Dec;762:37-51.	
25.	Main PA, Thomas P, Angley MT, Young R, Esterman A, King CE, **Fenech MF**. Lack of evidence for genomic instability in autistic children as measured by the cytokinesis-block micronucleus cytome assay. Autism Res. 2015 Feb;8(1):94-104.	4.5
26.	Panero J, O'Callaghan NJ, **Fenech M**, Slavutsky I. Absolute qPCR for measuring telomere length in bone marrow samples of plasma cell disorders. Mol Biotechnol. 2015 Feb;57(2):155-9.	2.3
27.	Lee SL, Thomas P, Hecker J, Faunt J, **Fenech M**. Chromosomal DNA damage measured using the cytokinesis-block micronucleus cytome assay is significantly associated with cognitive impairment in South Australians. Environ Mol Mutagen. 2015 Jan;56(1):32-40	2.6
28.	Francois M, Leifert W, Martins R, Thomas P, **Fenech M**. Biomarkers of Alzheimer's Disease Risk in Peripheral Tissues; Focus on Buccal Cells. Curr Alzheimer Res. 2014 11(6):519-31	3.7
29.	Chua A, Thomas P, Wijesundera C, Clifton P, **Fenech M**. Effect of docosahexaenoic acid and furan fatty acids on cytokinesis block micronucleus cytome assay biomarkers in astrocytoma cell lines under conditions of oxidative stress. Environ Mol Mutagen. 2014 May 15. doi: 10.1002/em.21873.	3.7
30.	Bauer DC, Gaff C, Dinger ME, Caramins M, Buske FA, **Fenech M**, Hansen D, Cobiac L. Genomics and personalised whole-of-life healthcare. Trends Mol Med. 2014 May 4. pii: S1471-4914(14)00062-8. doi: 10.1016/j.molmed.2014.04.001.	9.6
31.	Yoo SS, Jorgensen TJ, Kennedy AR, Boice JD Jr, Shapiro A, Hu TC, Moyer BR, Grace MB, Kelloff GJ, **Fenech M**, Prasanna PG, Coleman CN. Mitigating the risk of radiation-induced cancers: limitations and paradigms in drug development. J Radiol Prot. 2014 Jun;34(2):R25-52.	1.4
32.	Nair-Shalliker V, Dhillon V, Clements M, Armstrong BK, **Fenech M**. The association between personal sun exposure, serum vitamin D and global methylation in human lymphocytes in a population of healthy adults in South Australia. Mutat Res Fundam Mol Mech Mutagen. 2014 Apr 12;765C:6-10.	3.9
33.	François M, Leifert W, Hecker J, Faunt J, Martins R, Thomas P, **Fenech M**. Altered cytological parameters in buccal cells from individuals with mild cognitive impairment and Alzheimer's disease. Cytometry A. 2014 Feb 25. doi: 10.1002/cyto.a.22453.	3.7
34.	Vecchio G, **Fenech M**, Pompa PP, Voelcker NH. Lab-on-a-Chip-Based High-Throughput Screening of the Genotoxicity of Engineered Nanomaterials. Small.2014 Mar 7. doi: 10.1002/smll.201303359.	7.8
35.	Bruschweiler ED, Hopf NB, Wild P, Huynh CK, **Fenech M**, Thomas P, Hor M, Charriere N, Savova-Bianchi D, Danuser B. Workers exposed to wood dust have an increased micronucleus frequency in nasal and buccal cells: results from a pilot study. Mutagenesis. 2014 May;29(3):201-7.	3.5
36.	O'Callaghan NJ, Bull C, **Fenech M**. Elevated plasma magnesium and calcium may be associated with shorter telomeres in older South Australian women. J Nutr Health Aging. 2014;18(2):131-6.	2.4
37.	Ramankutty P, de Klerk NH, Miller M, **Fenech M**, O'Callaghan N, Armstrong BK, Milne E. Ultraviolet radiation exposure and serum vitamin D levels in young children. J Paediatr Child Health. 2014 Jun 18. doi: 10.1111/jpc.12657. [Epub ahead of print]	1.2
38.	Gonçalves TS, Menezes LM, Trindade C, Machado Mda S, Thomas P, **Fenech M**, Henriques JA. Cytotoxicity and genotoxicity of orthodontic bands with or without silver soldered joints. Mutat Res Genet Toxicol Environ Mutagen. 2014 Mar 1;762:1-8.	3.9
39.	Zhou L, Salvado O, Dore V, Bourgeat P, Raniga P, Macaulay SL, Ames D, Masters CL, Ellis KA, Villemagne VL, Rowe CC, Fripp J; AIBL Research Group. MR-less surface-based amyloid assessment based on 11C PiB PET. PLoS One. 2014 Jan 10;9(1):e84777. doi: 10.1371/journal.pone.0084777.	3.7
40.	Kirsch-Volders M, Bonassi S, Knasmueller S, Holland N, Bolognesi C, **Fenech MF**. Commentary: critical questions, misconceptions and a road map for improving the use of the lymphocyte cytokinesis-block micronucleus assay for in vivo biomonitoring of human exposure to genotoxic chemicals-a HUMN project perspective. Mutat Res Rev. 2014 Jan-Mar;759:49-58.	6.4
41.	Kaput J, van Ommen B, Kremer B, Priami C, Monteiro JP, Morine M, Pepping F, Diaz Z, **Fenech M**, He Y, Albers R, Drevon CA, Evelo CT, Hancock RE, Ijsselmuiden C, Lumey LH, Minihane AM, Muller M, Murgia C, Radonjic M, Sobral B, West KP Jr. Consensus statement understanding health and malnutrition through a systems approach: the ENOUGH program for early life. Genes Nutr. 2014 Jan;9(1):378. doi: 10.1007/s12263-013-0378-y. Epub 2013 Dec 22.	3.3
42.	O'Callaghan N, Parletta N, Milte CM, Benassi-Evans B, **Fenech M**, Howe PR. Telomere shortening in elderly individuals with mild cognitive impairment may be attenuated with ω-3 fatty acid supplementation: a randomized controlled pilot study. Nutrition. 2014 Apr;30(4):489-91.	2.8
43.	Bull CF, Mayrhofer G, O'Callaghan NJ, Au AY, Pickett HA, Low GK, Zeegers D, Hande MP, **Fenech MF**. Folate deficiency induces dysfunctional long and short telomeres; both states are associated with hypomethylation and DNA damage in human WIL2-NS cells. Cancer Prev Res (Phila). 2014 Jan;7(1):128-38.	5.1
44.	**Fenech MF**. Nutriomes and personalised nutrition for DNA damage prevention, telomere integrity maintenance and cancer growth control. Cancer Treat Res. 2014;159:427-41.	6.0

45.	Dhillon VS, **Fenech M**. Mutations that affect mitochondrial functions and their association with neurodegenerative diseases. Mutat Res Rev 2014 Jan-Mar;759:1-13.	6.4
46.	Lee SL, Thomas P, **Fenech M**. Extracellular amyloid beta 42 causes necrosis, inhibition of nuclear division, and mitotic disruption under both folate deficient and folate replete conditions as measured by the cytokinesis-block micronucleus cytome assay. Environ Mol Mutagen. 2014 Jan;55(1):1-14.	3.7
47.	Zhang C, Sun C, Vallotton P, **Fenech M**, Pham TD. Automatic nuclear bud detection using ellipse fitting, moving sticks or top-hat transformation. J Microsc. 2013 Nov;252(2):122-34	1.6
48.	Bolognesi C, Knasmueller S, Nersesyan A, Thomas P, **Fenech M**. The HUMNxl scoring criteria for different cell types and nuclear anomalies in the buccal micronucleus cytome assay - an update and expanded photogallery. Mutat Res. Rev 2013 Oct-Dec;753(2):100-13.	6.4
49.	Tucker JD, Vadapalli M, Joiner MC, Ceppi M, **Fenech M**, Bonassi S. Estimating the lowest detectable dose of ionizing radiation by the cytokinesis-block micronucleus assay. Radiat Res. 2013 Sep;180(3):284-91.	2.7
50.	Bolognesi C, **Fenech M**. Micronucleus assay in human cells: lymphocytes and buccal cells. Methods Mol Biol. 2013;1044:191-207.	1.5
51.	Siddiqui MS, Filomeni E, François M, Collins SR, Cooper T, Glatz RV, Taylor PW, **Fenech M**, Leifert WR. Exposure of insect cells to ionising radiation in vivo induces persistent phosphorylation of a H2AX homologue (H2AvB). Mutagenesis. 2013 Sep;28(5):531-41.	3.7
52.	Main PA, Thomas P, Esterman A, **Fenech MF**. Necrosis is increased in lymphoblastoid cell lines from children with autism compared with their non-autistic siblings under conditions of oxidative and nitrosative stress. Mutagenesis. 2013 Jul;28(4):475-84.	3.7
53.	Burnham SC, Faux NG, Wilson W, Laws SM, Ames D, Bedo J, Bush AI, Doecke JD, Ellis KA, Head R, Jones G, Kiiveri H, Martins RN, Rembach A, Rowe CC, Salvado O, Macaulay SL, Masters CL, Villemagne VL; Alzheimer's Disease Neuroimaging Initiative; Australian Imaging, Biomarkers and Lifestyle Study Research Group. A blood-based predictor for neocortical Aβ burden in Alzheimer's disease: results from the AIBL study. Mol Psychiatry. 2014 Apr;19(4):519-26.	14.9
54.	Valdiglesias V, Giunta S, **Fenech M**, Neri M, Bonassi S. γH2AX as a marker of DNA double strand breaks and genomic instability in human population studies. Mutat Res. Rev 2013 Jul-Sep;753(1):24-40.	6.4
55.	**Fenech, Michael**; Kirsch-Volders, Micheline; Rossnerova, Andrea; et al. HUMN project initiative and review of validation, quality control and prospects for further development of automated micronucleus assays using image cytometry systems INTERNATIONAL JOURNAL OF HYGIENE AND ENVIRONMENTAL HEALTH Volume: 216 Issue: 5 Pages: 541-552	3.6
56.	Ferguson LR, **Fenech MF**. Vitamin and minerals that influence genome integrity, and exposure/intake levels associated with DNA damage prevention. Mutat Res. 2012 May 1;733(1-2):1-3.	3.5
57.	Doecke JD, Laws SM, Faux NG, Wilson W, Burnham SC, Lam CP, Mondal A, Bedo J, Bush AI, Brown B, De Ruyck K, Ellis KA, Fowler C, Gupta VB, Head R, Macaulay SL, Pertile K, Rowe CC, Rembach A, Rodrigues M, Rumble R, Szoeke C, Taddei K, Taddei T, Trounson B, Ames D, Masters CL, Martins RN; Alzheimer's Disease Neuroimaging Initiative; Australian Imaging Biomarker and Lifestyle Research Group. Blood-based protein biomarkers for diagnosis of Alzheimer disease. Arch Neurol. 2012 Oct;69(10):1318-25.	7.7
58.	Erin L. Symonds, Izabela Konczak and **Michael Fenech**. The Australian fruit Illawarra plum (Podocarpus elatus Endl., Podocarpaceae) inhibits telomerase, increases histone deacetylase activity and decreases proliferation of colon cancer cells. 2012. British Journal of Nutrition, doi:10.1017/S0007114512004333	3.0
59.	Caroline Bull, Helen Christensen, **Michael Fenech**. Cortisol is associated with longer telomeres in human lymphocytes cultured in folate-replete and deficient conditions. European Journal of Psychotraumatology. 2012. Vol 3.	n/a
60.	Karunrat Sakulnarmrat, **Michael Fenech**, Philip Thomas, Izabela Konczak. Cytoprotective and pro-apoptotic activities of native Australian herbs polyphenolic-rich extracts. Food Chemistry. Volume 136, Issue 1, 1 January 2013, Pages 9–17.	4.2
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