

Personal Statement – Roslyn Kemp
IUIS Council 2026-28

I have been privileged to be part of IUIS governance since 2016, first as two terms as Secretary-General and, from 2023-25, as a member of Council.

In my first term on Council, I have coordinated Council activities, bringing together Council members in a meaningful and robust way to improve our contributions to the IUIS. I surveyed Council members and collated the responses to create a discussion document for the 2024 Council meeting to clarify the roles of Council. This coordination has led to the development of a draft Strategic Plan and Terms of Reference, and the identification of new areas of work for Council, including development of policies for childcare at the IUIS conference, sustainability and plans to provide translation of essential documents into multiple languages. I look forward to further developing Council's activities in all of these areas for IUIS in a second term.

I am part of the Gender Equity Committee, where I created Terms of Reference and the selection process for the EXCEL award. I am also part of the Education Committee, leading creation of online pre-course content for IUIS courses. I have created a conflict-of-interest policy for the Education and Gender Equity Committees and improved the application and selection process for IUIS-funded courses. In 2024, I created a proposal to better coordinate all IUIS-associated education activities, including those from IUIS Committees and member societies, to enhance our contribution to immunology education worldwide. If elected, I hope to use these experiences to support better communication, governance and policies for IUIS, and to enhance its international reputation, including via our existing partnerships with WHO and the International Science Council.

I lead a research group in New Zealand, focussed on studying immune cell heterogeneity and clinical outcomes in patients with cancer and inflammatory bowel diseases, with national awards for teaching and postgraduate supervision. I have held leadership roles in research strategy at the university and nationally, including a role with oversight of research activities of >700 researchers across seven schools, incorporating biomedical sciences, medicine and pharmacy. For 20 years, I have led equity initiatives at the university and through national and international professional societies, particularly for women and Māori (NZ's founding and indigenous people).

I have worked in four countries as an immunologist and remain a current member of the Australia & New Zealand Society for Immunology, the British Society of Immunology and the American Association of Immunologists. I am standing again for Council, just as in my first term, not to represent a specific society or geographic region, but rather to bring an international perspective and to support IUIS's vision of "immunology without borders".

1a. Personal details	
Title (optional)	Professor
First Name(s)	Roslyn
Family Name	Kemp
Iwi Affiliation, Pacific identity and/or any other as applicable	N/A
Present position	Professor
Organisation/Employer	University of Otago, Otakou Whakaihu Waka
Contact Address	Department of Microbiology and Immunology
	PO Box 56, Dunedin 9010
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Email	roslyn.kemp@otago.ac.nz
Personal website (if applicable)	http://micro.otago.ac.nz/research/research-labs/kemp-lab-research
Research identifier (if applicable)	ORCID: 0000-0001-9092-1150

1b. Academic qualifications
2002, Ph.D., Immunology, University of Otago / Malaghan Institute of Medical Research
1998, B.Sc. (Hons I), Microbiology, University of Otago

1c. Professional positions held
2021 - Professor; 2017- 2020 Associate Professor; 2009-2017 (Senior) Lecturer, Department of Microbiology and Immunology, University of Otago
2008-2009 Research Fellow, Cancer Genetics Laboratory, University of Otago
2005-2008 MRC Career Development Fellow, NIMR, UK
2004-2005 Post-doctoral Fellow, Oxford University, UK
2002-2004 Post-doctoral Fellow, Trudeau Institute, USA

1d. Present research/professional speciality
I study the immune responses of the gut, including colorectal cancer and inflammatory bowel diseases. I specialise in T cells and how these cells can be modified to improve immune responses. I have expertise in high dimensional data analyses. My research uses <i>in vivo</i> models and clinical samples.

1e. Career break events (if applicable)

Parental leave: September 2016 – February 2017

1f. Professional distinctions and memberships (including honours, prizes, grants, scholarships, boards, editorial and/or governance roles, etc.)
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Professional Distinctions and Memberships

2024: ASI Jacques Miller Award
2024: John Nott Fellowship; Cancer Society of Western Australia
2025-2027 Deputy Director; Maurice Wilkins Centre for Biodiscovery, New Zealand
2023-2025 Council Member; International Union of Immunological Societies (IUIS)
2022-ongoing Australasian Myeloma Research Consortium
2021-2023 Associate Dean, Research, Division of Health Sciences
2021-2024 Maurice Wilkins Centre (NZ) Research Leadership Forum
2020-ongoing Editorial Board, Immunology Advances
2021-ongoing Editorial Board, Immunology and Cell Biology

2024-ongoing Editorial Board, Immunity and Inflammation
 2017-2019 President, New Zealand Society for Oncology (NZSO), Member, 2009-ongoing
 2016 NZSO Roche Translational Cancer Research Fellowship
 2016-2022 Secretary General, International Union of Immunological Societies
 2015-ongoing Member, Ako Aotearoa Academy of Tertiary Teaching Excellence
 2015 Miriam Dell Award (Association of Women in Sciences)
 2015 Ako Aotearoa National Tertiary Teaching Excellence Award
 2015 University of Otago Award for Teaching Excellence
 2013-ongoing Editor, Frontiers in Immunology, Frontiers in Medicine
 2013-16 NZ Councillor; Australia and New Zealand Society of Immunology (ASI)
 2013, 2020 University of Otago Supervisor of the Year
 2013-ongoing Associate Investigator, Maurice Wilkins Centre
 2012, 2017 NZ ASI Immunology Conference Organising Committee
 2010-ongoing Founding and Steering Committee Member; Gut Health Network
 2010-2013 Member of ASI Annual Meeting Local Organising Committee
 2009-2015 NZ rep Infection & Immunity Special Interest Group, ASI
 2009-2012 Steering Committee; Formulation and Delivery of Bioactives
 2009-2016 University of Otago Flow Cytometry Facility Committee
 2009-2019 Otago School of Biomedical Sciences (BMS) Māori Student Support (kaitohutohu from 2015-2018)

Current Society Memberships:

ASI; British Society of Immunology; American Association of Immunologists (AAI); New Zealand Society of Gastroenterology; Federation of Clinical Immunological Societies; NZ Association of Scientists; Association for Women in Science

Significant Leadership Positions:

IUIS: Executive Council (2016-22); Council (2023-5); Co-Chair Publications Committee (2018-2023); Vice-Chair Education Committee (Chair Online Learning Subcommittee; 2024-6); Vice-Chair Gender Equity Committee (2024-6)

University of Otago: Associate Dean Research (Division of Health Sciences; 2021-23)

ASI: Council (2013-16)

Invited Speaker

2024 Flinders University, Adelaide, Australia
 2024 University of Western Australia, Perth, Australia
 2023 ASI Education Special Interest Group, Australia
 2022 ASI Annual Scientific Meeting, Melbourne, Australia
 2021 University of Melbourne, Australia
 2021 Monash University, Australia
 2019 ASI Annual Scientific Meeting, Adelaide, Australia
 2019 IUIS International Congress, Beijing, China
 2019 Brisbane Immunology Group Scientific Meeting, Sunshine Coast, Australia (plenary)
 2018 Australasian Cytometry Society, Adelaide, Australia
 2018 New Zealand Society of Gastroenterology, Dunedin, NZ
 2018 Peruvian Society of Immunology International Congress, Lima, Peru (plenary)
 2017 Federation of African Immunological Societies Conference, Tunisia
 2016 Auckland Cancer Research Network Summer School
 2015-2017 NZSO, Christchurch, Auckland, NZ
 2015 Digestive Diseases Queenstown, NZ
 2015 Cancer Trials New Zealand, Auckland (Keynote Speaker), NZ
 2014 Cancer Drug Discovery satellite meeting, Queenstown, NZ
 2012 Diet, Microbiota and Gut Health Workshop, Bologna, Italy

1g. Total number of <i>peer reviewed</i> publications	Journal articles	Books	Book chapters, books edited	Conference proceedings
	49	1	4	>80

PART 2

2a. Research publications and dissemination

Peer-reviewed journal articles

1. Munoz-Erazo L, Park S, Lin S, Chen CJJ, Zhou LYY, Rhodes JL, Jeon T, Fenton S, McCall JL, **Kemp RA** and Dunbar PR. A novel approach to digital characterisation of Tertiary Lymphoid Structures in colorectal cancer. *Frontiers Immunol*. Accepted Jan 2025
2. Borger J, Longely R, Taylor M, Motrich R, Payne J, **Kemp R**. Global perspectives to enhance strategies for advancing women in healthcare and STEM. *Immunol Cell Biol*. Accepted Nov 2024
3. Ombasa L, Miller J, Ware L, Abbotts-Holmes H, Tang J, Gasser O, Fraser K, Bayer S, Kemp R, Costello R, Highton A, Evans J, Merry T, Schultz M, Frampton C, Gearry R, McNabb W, Roy N. Impact of mānuka honey on symptoms and quality of life in individuals with functional dyspepsia: a feasibility study protocol. *JMIR Preprints*. 14/09/2024:66417
DOI: [10.2196/preprints.66417](https://doi.org/10.2196/preprints.66417)
4. Norton SE, Khong T, Ramachandran M, Highton AJ, Ward-Hartstonge KA, Shortt J, Spencer A, Kemp RA. Changes in immune cell populations following KappaMab, lenalidomide and low-dose dexamethasone treatment in multiple myeloma. *Clin Transl Immunology*. 2023 Nov 30;12(12):e1478. doi: 10.1002/cti2.1478. PMID: 38034081; PMCID: PMC10688504.
5. Major G, Longoni A, Simcock J, Magon NJ, Harte J, Bathish B, **Kemp R**, Woodfield T, Lim KS. Clinical Applicability of Visible Light-Mediated Cross-linking for Structural Soft Tissue Reconstruction. *Adv Sci (Weinh)*. 2023 Sep;10(26):e2300538. doi: 10.1002/advs.202300538. Epub 2023 Jul 9.
6. Angus HC, Urbano PC, Laws GA, Fan S, Gadeock S, Schultz M, Butt G, Highton AJ, **Kemp RA**. An autologous colonic organoid-derived monolayer model to study immune: bacterial interactions in Crohn's disease patients. *Clin Transl Immunology*. 2022 Aug 1;11(8):e1407. doi: 10.1002/cti2.1407.
7. Naqash A, Stuart G, **Kemp R**, Wise L. Parapoxvirus Interleukin-10 Homologues Vary in Their Receptor Binding, Anti-Inflammatory, and Stimulatory Activities. *Pathogens*. 2022 Apr 24;11(5):507. doi: 10.3390/pathogens11050507.
8. Urbano PCM, Angus HCK, Gadeock S, Schultz M, **Kemp RA**. Assessment of source material for human intestinal organoid culture for research and clinical use. *BMC Res Notes*. 2022 Feb 10;15(1):35. doi: 10.1186/s13104-022-05925-4.
9. Hazlett J, Niemi V, Aiderus A, Powell K, Wise L, **Kemp R**, Dunbier AK. Oestrogen deprivation induces chemokine production and immune cell recruitment in in vitro and in vivo models of oestrogen receptor-positive breast cancer. *Breast Cancer Res*. 2021 Oct 3;23(1):95. doi: 10.1186/s13058-021-01472-1.
10. Kalf A, Khong T, Ramachandran M, Ho PJ, Mollee P, D'Rozario J, Taylor K, Estell J, Norton S, **Kemp R**, Mitchell AJ, Reynolds J, Kennedy N, Quach H, Spencer A. Planned withdrawal of dexamethasone after pomalidomide low-dose dexamethasone induction for lenalidomide-refractory multiple myeloma (ALLG MM14). *Haematologica*. 2022 Jan 1;107(1):321-325. doi: 10.3324/haematol.2021.278655.
11. Nacuite M, Kiwitt T, **Kemp RA**, Hook S. Bacteria biohybrid oral vaccines for colorectal cancer treatment reduce tumor growth and increase immune infiltration. *Vaccine*. 2021 Sep 15;39(39):5589-5599. doi: 10.1016/j.vaccine.2021.08.028.
12. Laws GL, Hale JDF, **Kemp RA**. Human Systemic Immune Response to Ingestion of the Oral Probiotic *Streptococcus salivarius* BLIS K12. *Probiotics Antimicrob Proteins*. 2021 Dec;13(6):1521-1529. doi: 10.1007/s12602-021-09822-3.
13. Marsh-Wakefield FM, Mitchell AJ, Norton SE, Ashhurst TM, Leman JK, Roberts JM, Harte JE, McGuire HM, **Kemp RA**. Making the most of high-dimensional cytometry data. *Immunol Cell Biol*. 2021 Aug;99(7):680-696. doi: 10.1111/imcb.12456.
14. Niemi V, Gaskarth D, **Kemp RA**. Extensive variability in the composition of immune infiltrate in different mouse models of cancer. *Lab Anim Res*. 2020 Nov 19;36(1):43. doi: 10.1186/s42826-020-00075-9.
15. Nacuite M, Niemi V, **Kemp RA**, Hook S. Lipid-encapsulated oral therapeutic peptide vaccines reduce tumour growth in an orthotopic mouse model of colorectal cancer. *European Journal of Pharmaceutics and Biopharmaceutics*. 2020. 152:183-192.

16. Munoz-Erazo L, Rhodes JL, Marion VC and **Kemp RA**. Tertiary Lymphoid Structures in Cancer – considerations for patient prognosis. *Cellular and Molecular Immunology*, 2020. 17(6):570-575.
17. Norton SE, Leman JKH, Khong T, Spencer A, Fazekas de St Groth B, McGuire HM, **Kemp RA**. Brick plots: an intuitive platform for visualizing multiparametric immunophenotyped cell clusters. *BMC Bioinformatics*, 2020. 21(1):145.
18. Angus HCK, Butt AG, Schultz M, **Kemp RA**. Intestinal organoids as a tool for inflammatory bowel disease research. *Front. Med.* 2020; 6:334
19. Norton SE, Ward-Hartstonge KA, McCall JLK, Leman JKH, Taylor ES, Munro F, Black MA, Fazekas de St Groth B, McGuire HM, **Kemp RA**. High dimensional mass cytometric analysis reveals an increase in effector regulatory T cells as a distinguishing feature of colorectal tumors. *J Immunol.* 2019 ;202(6):1871-1884.
20. Lepletier, A, Lutzky VP, Mittal D, Stannard K, Watkins TS, Ratnatunga CN, Smith C, McGuire HM, **Kemp RA**, Mukhopadhyay P, Waddell N, Smyth MJ, Dougall WC, Miles JJ. The immune checkpoint CD96 defines a distinct lymphocyte phenotype & is highly expressed on tumor-infiltrating T cells. 2018. *Immunol Cell Biol.* 97(2):152-164
21. Leman JKH, Sandford SK, Rhodes JL, **Kemp RA**. Multiparametric analysis of colorectal cancer immune responses. 2018. *World J Gastroenterol.* Jul 21;24(27):2995-3005. doi: 10.3748/wjg.v24.i27.2995
22. Taylor ES, McCall JL, Shen S, Girardin A, Munro F, Black MA, Ward-Hartstonge KA, **Kemp RA**. Prognostic roles for IL-2-producing and CD69+ T cell subsets in colorectal cancer patients. *Int J Cancer* 2018 Oct 15; 143(8):2008-2016
23. Ward-Hartstonge KA, **Kemp RA**. Regulatory T cell heterogeneity and the cancer immune response. *Clin Trans Immunol.* 2017; 6(9):e154
24. Ward-Hartstonge KA, McCall JL, McCulloch TR, Kamps A-K, Girardin A, Cretney E, Munro FM, **Kemp RA**. Inclusion of BLIMP-1+ effector regulatory T cells improves the Immunoscore in a cohort of New Zealand colorectal cancer patients: a pilot study. *Cancer Immunol Immunother*, 2017; 66(4):515-522
25. Taylor ES, McCall JL, Girardin A, Munro FM, Black MA, **Kemp RA**. Functional impairment of infiltrating T cells in human colorectal cancer. *Oncoimmunol.* 2016; 5(11) e1234573
26. Highton AJ, Girardin A, Bell GM, Hook SM, **Kemp RA**. Chitosan gel vaccine protects against tumour growth in an intracaecal mouse model of cancer by modulating systemic immune responses. *BMC Immunol.* 2016; 17(1):39
27. Neumann S, Shirley SA, **Kemp RA**, Hook SM. Improved antitumour activity of a therapeutic melanoma vaccine through the use of the dual COX-2/5-IO inhibitor licoferene. *Front Immunol.* 2016; 7:537
28. Parayath NN, Nehoff H, Norton SE, Highton AJ, Taurin S, **Kemp RA**, Greish K. Styrene maleic acid encapsulated paclitaxel micelles: anti-tumour activity and toxicity studies following oral administration in a murine orthotopic colon cancer model. *Int J Nanomedicine.* 2016 :11 3979-91
29. Norton SE, Dunn ETJ, McCall JL, Munro F, **Kemp RA**. Gut macrophage phenotype is dependent on the tumor microenvironment in colorectal cancer. *Clinical Transl Med.* 2016. 5, e76; doi: 10.1038/cti.2016.21
30. Dunn ETJ, Taylor ES, Stebbings S, Schultz M, Butt AG, **Kemp RA**. Distinct immune signatures in the colon of Crohn's Disease and Ankylosing Spondylitis patients in the absence of inflammation. *Imm Cell Biol.* 2016. 94(5):421
31. Norton SE, Ward-Hartstonge KA, Taylor ES, **Kemp RA**. Immune cell interplay in colorectal cancer prognosis. *World J Gastrointest Oncol.* 2015 7(10)221-32 (Invited review)
32. Highton AJ, Kojarunchitt T, Girardin A, Hook S, **Kemp RA**. Chitosan hydrogel vaccine generates protective CD8 T cell memory against mouse melanoma. *Imm Cell Biol* 2015. 93 (7):634-40
33. Neumann S, Burkert K, **Kemp R**, Rades T, Dunbar PR, Hook S. Activation of the NLRP3 inflammasome is not a feature of all particulate vaccine adjuvants. *Imm Cell Biol.* 2014. 92(6):535-42
34. **Kemp R**, Dunn E, Schultz M. Immunomodulators in Inflammatory Bowel Disease: an emerging role for biologic agents *BioDrugs* 2013 27(6):585-90
35. Girardin A, McCall J, Black MA, Edwards F, Phillips V. Taylor ES, Reeve AE, **Kemp RA**.

Inflammatory and regulatory T cells contribute to a unique microenvironment in tumor tissue of colorectal cancer patients Int J Cancer 2013 132: 1842-50

36. **Kemp RA**, Black MA, McCall J, Yoon H-S, Phillips V, Anjomshoaa A, Reeve AE. T cell subpopulations in lymph nodes may not be predictive of patient outcome in colorectal cancer. J Exp Clin Cancer Res 2011 30:78.

37. Ting YT, Coates PT, Marti HP, Dunn AC, Parker RM, Jack RW, **Kemp RA**, Walker RJ, McLellan AD. Urinary soluble HLA-DR is a potential biomarker for acute renal transplant rejection. Transplantation. 2010 89(9):1071-8

38. **Kemp RA**, Pearson CF, Cornish GH, Seddon BP. Evidence of STAT5 dependent and independent routes to CD8 memory formation and a preferential role for IL-7 over IL-15 in STAT5 activation. Imm. Cell. Biol. 2010 88:213

39. **Kemp RA**, Backstrom BT, Ronchese F. The phenotype of Type 1 and Type 2 CD8+ T cells activated in vitro is affected by culture conditions and correlates with effector activity. Immunol. 2005 115(3) 315-24.

40. Jelley-Gibbs DM, Dibble JP, Filipson S, Haynes L, **Kemp RA**, Swain SL. Repeated stimulation of CD4 effector T cells can limit their protective function. J Exp Med. 2005 210(7):1101-12

41. Powell TJ, Brown DM, Hollenbaugh JA, Charbonneau T, **Kemp RA**, Swain SL, Dutton RW. CD8+ T cells responding to influenza infection reach and persist at higher numbers than CD4+ T cells independently of precursor frequency. Clin Immunol. 2004 113(1):89-100.

42. **Kemp RA**, Powell TJ, Dwyer DW, Dutton RW. Cutting edge: regulation of CD8+ T cell effector population size. J Immunol. 2004 173(5):2923-7

43. Begg, D, **Kemp R**, Griffin JFT. Normal levels of immunocompetence in possums (*Trichosurus vulpecula*) exposed to different laboratory housing conditions post capture. Immunol Cell Biol. 2004 82(3):253-6.

44. **Kemp RA**, Ronchese F. Tumor-specific Tc1, but not Tc2, cells deliver protective antitumor immunity. J Immunol. 2001 167(11):6497-502.

45. [†]Chtanova T, [†]**Kemp RA**, Sutherland AP, Ronchese F, Mackay CR. Gene microarrays reveal extensive differential gene expression in both CD4(+) and CD8(+) type 1 and type 2 T cells. J Immunol. 2001 167(6):3057-63. ^{††} contributed equally

Peer reviewed books

Peer reviewed book chapters, books edited

1. Highton A, **Kemp RA**. Immunological Background 2015. C. Foged et al. (eds.), *Subunit Vaccine Delivery*, Advances in Delivery Science and Technology, DOI 10.1007/978-1-4939-1417-3_1

2. Norton S., **Kemp R**. 2019 Computational Analysis of High-Dimensional Mass Cytometry Data from Clinical Tissue Samples. In: McGuire H., Ashhurst T. (eds) Mass Cytometry. Methods in Molecular Biology, vol 1989. Humana, New York, NY

3. Leman JKH, Munoz-Erazo L, **Kemp RA**. The Intestinal Tumour Microenvironment. Adv Exp Med Biol 2020 1226:1-22

Peer reviewed conference proceedings

Kemp RA, Brown DM. How to be a scientist: critical thinking in the life sciences. <https://doi.org/10.1201/9781003326366>

Other forms of dissemination (reports for clients, technical reports, patents, popular press, public outreach, community engagement etc.)

1. Rory M. Costello, Sonya Fenton, Helen McGuire, Liang Lim, David Howell, Qanber Raza, Jyh Yun Chwee, **Roslyn Kemp**; Abstract 67: Predicting colorectal patient prognoses by functional characterisation of heterogeneous cell types and their spatial interaction using a new technique: Whole slide imaging mass cytometry. *Cancer Res* 15 March 2024; 84 (6_Supplement):

2. Sarfati, D..., Ian Bissett, Bridget Robson, Jason Gurney, **Roslyn Kemp**, Natalie James, Jonathan Adler, Nina Scott, John McMenamin. Cancer Care at a Crossroads: time to make a choice. NZ Med J. 2019 Volume 132 Number 1493

3. Gemma A Laws and **Roslyn A Kemp**. Probiotics and health: understanding probiotic trials. NZ Med J. 2019 Volume 132 Number 1498