CURRICULUM VITAE

Name: Mark John SMYTH

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Date/Place of Birth: April 4, 1963; Hobart, Australia

Citizenship: Australian

Dependents: Sons - Lachlan, Cameron, Sean

Education:

1981 - 1983	B. Sc. University of Melbourne (Biochemistry/Pathology)
1984	B. Sc. (Hons.) University of Melbourne (H1) (Pathology)
1985 - 1988	Ph.D., Research Centre for Cancer and Transplantation, Department of Pathology, University of Melbourne
June 1987 - July 1987	Farmitalia Carlo Erba, Milan, Italy

Current Appointment:

Senior Scientist, NH&MRC Australia Fellow
Head of Immunology in Cancer and Infection Laboratory
QIMR Berghofer Medical Research Institute

Position and Responsibility:

I am one of 8 Senior Scientists leader of the Immunology in Cancer and Infection Laboratory of the QIMR Berghofer Medical Research Institute (13 staff and 6 higher degree students).

Other Appointments Currently Held:

2012-	Honorary Professor, University of Queensland
2013-	Honorary Professor, Queensland University of Technology

Executive Summary

POSITION AND RESPONSIBILITY

I am a NH&MRC Senior Principal Research Fellow, Senior Scientist (one of eight at QIMR), Immunology Coordinator and Head of the Immunology in Cancer and Infection Laboratory at the QIMR Berghofer. I am a member of one of the most productive NH&MRC Programs in Australia. I am a Fellow of the Australian Academy of Health and Medical Sciences and former NH&MRC Australia Fellow.

MAJOR ORIGINAL RESEARCH CONTRIBUTIONS

I am regarded as a world leader in several fields including currently: tumour immunology and natural killer (NK) biology; and in the past: lymphocyte-mediated mechanisms of cell death and multi-drug resistance and NKT cell biology. Key past and recent primary papers in these fields and reviews in premier immunology journals are outlined below. I currently have 532 peer-review papers published or in press, with a large proportion of these in the highest impact journals. These papers have attracted a total of 50,194 citations. My H-index is currently 118 (M index = 3.81, i10 index = 423, Google Scholar). I am the most highly cited immunologist in Australia and one of the world's highest in tumor immunology. Initially, I was intimately involved in isolating and describing the transcriptional control and function of lymphocyte cytotoxic granule proteins, and since 1998 I have established a broad program of research focussed on understanding the biological functions of killer lymphocyte cells and proteins and exploring the potential of cytokines and cytotoxic lymphocytes in natural tumor immunity and cancer immunotherapy. Major highlights include:

• first characterised the specificity and transcriptional regulation of perforin and lymphocyte effector function.

• helped dissect the major players in lymphocyte-mediated apoptosis.

These studies collectively culminated in my 1995 Australian Academy of Science Gottschalk Medal.

• described a new function for P-glycoprotein.

For this work I won the 1998 AMGEN Medical Research Award.

• first defined a role for NK and NKT cells in tumor immune surveillance.

• proved that lymphocyte cytotoxicity was important in cancer immune surveillance.

• first defined a physiological role for TRAIL as a tumor suppressor.

These studies collectively rekindled world-wide interest in cancer immune surveillance, substantiating the concept, and focusing greater attention on the function of NKT cells and TRAIL. For this work I was awarded two international general immunology and cancer research prizes, namely the 2002 William B. Coley Award (USA) and more recently the biennial 2007 Charles Rodolphe Brupbacher Prize (Switzerland). I am the youngest ever recipient of both these awards.

• made key discoveries linking NK cells and adaptive T cell control of tumors and viruses.

• defined a role for NKG2D in cytokine and host protection from tumor initiation.

• demonstrated a unique combination of pathways that can potently reject established cancers in mice.

• first defined immune-mediated dormancy of cancer.

This study is amongst my most important work to date.

• first defined CD73 as a promising target of cancer immunotherapy.

• first defined CD96 a novel immune checkpoint.

MAJOR PRIZES AND DISTINCTIONS

2015	QIMR Berghofer Ralph Doherty Prize
2015	Thomson Reuters Highly Cited Researchers - Immunology
2014	Highest ranked NH&MRC Development Grant
2014	Highest ranked NH&MRC Research Fellowship
2014	NH&MRC Senior Principal Research Fellowship
2015	Fellow of Australian Academy of Health and Medical Sciences
2010	NH&MRC Australia Fellowship
2009	Glaxo Smith Kline Award for Excellence
2007	Charles Rodolphe Brupbacher Prize
2006	NH&MRC Senior Principal Research Fellowship
2002	Cancer Research Institute William B. Coley Medal

1998 AMGEN Medical Research Award
1995 Australian Academy of Science Gottschalk Medal

CAREER FELLOWSHIPS
2014 NH&MRC Senior Principal Research Fellowship; 2010 NH&MRC Australia Fellowship; 2006 NH&MRC Senior Principal Research Fellowship; 1999&2003 NH&MRC Principal Research Fellowships; 1994-98 Wellcome Trust Senior Research Fellowship in Medical Science (Aust./NZ); 1993 NH&MRC R. Douglas Wright Research Fellowship; 1989-92 NH&MRC C. J. Martin Fellowship; 1988-89 NIH Fogarty Visiting Fellowship

PROFILE AND STANDING AT INTERNATIONAL AND NATIONAL LEVEL
I have been awarded two prestigious international prizes in basic immunology and cancer research and most recently the national GSK Award (see above). I currently hold a NH&MRC Program grant and three highly competitive International grants (Susan G. Komen, Cancer Research Institute). Past International grant support from 1993-2008 includes grants from the NIH, Human Frontiers in Science Program, Susan G. Komen Foundation, AICR, Leukemia and Lymphoma, Wellcome Trust, US Army DOD, and Cancer Research Institute. Nationally - NH&MRC (for 19 years), MSA, VBCRC, Leukemia Foundation, VCA, and CCV. Collectively, totaling >$AUS50M. Since 2007, I have received more than 40 invitations to speak/chair at major international immunology/cancer conferences, including many plenary presentations and the prestigious Gordon Ada and Ashley Dunn orations. I have regularly reviewed many international grants (NIH, EuroCom, HFSP, Wellcome, cancer grants for multiple countries etc.), regularly reviewed for premier journals (Cell and Nature journals, Science, J. Exp. Med.), and regularly been invited to write reviews (Science, Nature journals, Immunity). I am an Editorial Board member at Science and a Senior Editor at Cancer Research, a section editor of the Journal of Leukocyte Biology, on the Editorial Boards of Cancer Immunology Research, Clinical and Translational Immunology, Oncoimmunology, Immunotherapy, Frontiers in Molecular and Cellular Oncology and The Faculty of 1000. I was on the Editorial Board of The Journal of Biological Chemistry (2005-2010). I was invited to review a major general foreign national science prize in 2008 and organize 2011 and 2016 Keystone Meetings. I am on the Scientific Advisory Board of the Cancer Research Institute (USA).

SERVING THE DISCIPLINE AND TEACHING
I have also regularly served on NH&MRC GRP, CDA or Fellowship panels, and with the Australasian Society for Immunology and local branch since 1995. I have trained/supervised 33 post-docs and 31 post-graduate students - some have won Pfizer Fellowships, NH&MRC RD Wright and Doherty Fellowships, the Premiers Award, or the Victoria Fellowship. I founded the Cancer Research Institute Pre-doctoral Emphasis Program in Tumour Immunology in Melbourne (2004-current).

RESEARCH APPLICATIONS
My Ph.D. studies culminated in 4 patents and phase I clinical trials in cancer patients. Subsequently, Farmitalia Carlo Erba (Italy) shared our technology and the immunosuppressive properties of Idarubicin-mAb conjugates resulted in R &D syndicate funding of over $3 million to the Austin Research Institute. I have lodged 6 patents in the past 5 years, and my research has resulted in the founding of two start-up companies, Cytoscreen Pty Ltd., and PerfoRx Pty Ltd. I have been and am a consultant to several major pharma for the clinical development of immunotherapeutics. Clinically, I have been integral in developing a Phase I trial in adoptive immunotherapy of genetically engineered T cells (the first of its kind in Australia), and new trials of Her2 targeted therapies in combination with anti-PD1 (PANACEA), combination radiotherapy and T cell checkpoint blockade, TRAIL agonists, HDACi, velcade, and DC vaccination, including some in combination. I have attracted pharmaceutical support for pre-clinical studies from Medimmune, Aduro Biotech, GSK, Novartis, Pfizer, AMGEN and Costim. Patent IP on adoptive cellular therapy was licenced to Juno in 2015 for undisclosed upfront, R&D program and milestones and royalties. Patent IP on CD96 was licenced to Bristol Myers Squibb in 2015 for undisclosed upfront, R&D program and milestones and royalties.

Previous Appointments:

2007-2013	Honorary Professor, University of Melbourne
2007-2013	Honorary Professor, Monash University
Mar. 2000-Mar. 2013	Program Head, Cancer Immunology Program, Peter MacCallum Cancer Centre, Melbourne, Australia
Apr. 2010-Mar.2013	NH&MRC Australia Fellow, Peter MacCallum Cancer Centre, Melbourne, Australia
Jan. 2007-Mar.2010	NH&MRC Senior Principal Research Fellow, Peter MacCallum Cancer Centre, Melbourne, Australia
Jan. 2004-Dec.2006	NH&MRC Principal Research Fellow, Peter MacCallum Cancer Centre, Melbourne, Australia
Mar. 2000-Dec.2003	NH&MRC Principal Research Fellow, Peter MacCallum Cancer Centre, Melbourne, Australia
Jan. 1999-Mar.2000	NH&MRC Principal Research Fellow, Austin Research Institute, Melbourne, Australia
1998-2000	Associate Professor, Victoria University Of Technology
1998-2000	Senior Fellow in the Department of Medicine, Austin and Heidelberg Repatriation Medical Centre
1996-1998	Senior Associate in the Department of Pathology, University of Melbourne
Jan.1994 - Dec.1998	Wellcome Trust Senior Research Fellow in Medical Science, Austin Research Institute, Melbourne, Australia
1993-	Senior Associate in the Department of Surgery, Austin and Heidelberg Repatriation Hospitals, University of Melbourne
Jan.1993 - Dec.1993	R.Douglas Wright Research Fellow of the National Health and Medical Research Council of Australia, Austin Research Institute, Melbourne, Australia
Dec.1991 - Jan.1993	C. J. Martin Fellow of the National Health and Medical Research Council of Australia, Austin Research Institute, Melbourne, Australia
Dec.1989 - Dec.1991	C. J. Martin Fellow of the National Health and Medical Research Council of Australia, Frederick Cancer Research and Development Center, NCI, USA
Dec.1988 - Dec.1989	Visiting Fellow, Fogarty Visiting Program, Frederick Cancer Research and Development Center, NCI, USA
April - Dec.1988	Research Fellow, Grade I, Research Centre for Cancer and Transplantation, University of Melbourne, Australia

Individual honours, awards and prizes:

1984-87	Commonwealth Postgraduate Scholarship, University of Melbourne.
1988-89	NIH Fogarty Visiting Fellowship.
1989-92	NH&MRC C. J. Martin Fellowship.
1991	NCI -FCRDC Certificate of Appreciation for Outstanding Performance.
1992	Sandoz Young Investigators Award (TSANZ - Canberra).
1993	Australian Life Sciences Research Award.
1993	NH&MRC R. Douglas Wright Research Fellowship.
1994-98	Wellcome Trust Senior Research Fellowship in Medical Science.
1995	Australian Academy of Science Gottschalk Medal.
1998	AMGEN Medical Research Award.
1999-2003	NH&MRC Principal Research Fellowship.
2002	Cancer Research Institute, William B. Coley Award for Distinguished Research in Basic and Tumour Immunology.
2003	Commonwealth Health Minister's Award for Excellence in Health and Medical Research – Finalist
2004-2008	NH&MRC Principal Research Fellowship renewal.
2007-2011	NH&MRC Senior Principal Research Fellowship promotion.

2007	Charles Rodolphe Brupbacher Foundation Prize.
2007	Gordon Ada Oration, ASI, Sydney.
2009	Glaxo Smith Kline Award for Excellence.
2009	ASI Gordon Ada Award.
2010	NH&MRC Australia Fellowship
2011-	Member of Academy of Cancer Immunology, Cancer Research Institute, USA
2011-	Elected to European Academy of Tumor Immunology
2012	Career Award, European Academy of Tumor Immunology
2015	Fellowship of the Australian Academy of Health and Medical Sciences
2015	Ranked 1st NH&MRC Research Fellowships 2014 round
2015	Ranked 1st NH&MRC Development Grants 2014 round
2015	Thomson Reuters Highly Cited Researchers – Immunology
2015	QIMR Berghofer Ralph Doherty Prize

Travel awards:

1989	Society for Leukocyte Biology Travel Award (Hilton Head, USA).
1992	Sandoz Young Investigators Travelling Fellowship (TSANZ - Paris).
1993	EMBO Travel Award (EMBO-CMC Workshop - Neve Ilan, Israel).
1995	American Association of Immunologists Travel Award (San Francisco, USA).
1995	National Science Foundation Nevada EPSCoR Travel Award (Reno, USA).
1997	EMBO Travel Award (EMBO-CMC Workshop – Kerkrade, The Netherlands).
1998	Australian Academy of Science, Scientific Visits to Germany Scholarship.
2001	Ian Potter Foundation Travel Award (Stockholm, Sweden)
2005	Aegean Travel Award

Present Grant Support: (*International)

2016	Corvus ($US243,176): Research Collaboration Agreement. **M. J. Smyth**
2016	ASSC Project Grant ($AUS 47,000): "Immune contexture of transforming naevi". **M J. Smyth,** M. W. L. Teng, R. Khanna, R. Sturm, M. Stark, H. Schaider, B. Gabrielli.
2016	Aduro Biotech ($US270,720): Sponsored Research Agreement. **M. J. Smyth**
2016-2017	Cancer Council of Queensland (1102242) ($AUS 200,000): Checkpoint blockade and denosumab in the treatment of established primary and metastatic cancers. **M. J. Smyth.**
2016-2018	NH&MRC Project Grant (1098960)($AUS 739,234): New target pathway for cancer therapy. **M. J. Smyth** and M. W. L. Teng
2015-2017	NH&MRC Development Grant (1093566)($AUS 796,046): Development of CD96 antibodies for cancer treatment. **M. J. Smyth** and J. Miles
2015-2016	Cancer Council of Queensland (1083776) ($AUS 200,000): A new checkpoint target of cancer immunotherapy. **M. J. Smyth.**
Apr 2015-Jan 2020	NH&MRC Senior Principal Research Fellowship (1078671) ($AUS 911, 915): **M. J. Smyth.**
Sept 2015-Aug 2016	MedImmune. Sponsored Research Agreement ($US 317,196) **M. J. Smyth**.
Sep 2015-Aug 2016	Cancer Research Institute, Clinical Strategy Team Grant ($US 355,248): Targeting adenosine in the tumor microenvironment. **M. J. Smyth,** G.V. Long, R.S. Scolyer,

	J. Stagg, S. Antonia.
*June 2015-2017	Cancer Research Institute, Clinical and Laboratory Integration Program (CLIP) Grant ($US 200,000): The pre-clinical validation of CD96 as a checkpoint target for cancer immunotherapy. **M. J. Smyth.**
2012-2016	NH&MRC Program Grant (1013667) ($AUS 2,523,044 p/a, $AUS 12,615,220 in total): Immune regulation, effector function and therapy. **M. J. Smyth**, J. A. Trapani, R. W. Johnstone, D. I. Godfrey, H. M. Prince, and M. H. Kershaw.
*Jul 2012- Jul 2016	Susan G. Komen Breast Cancer Foundation Program Grant (IIR12221504) ($US 900,000): 'Targeting CD73 for the treatment of triple negative breast cancer'. J. Stagg and **M. J. Smyth**.

Past Project Grant Support:

2011-2015	Centre for Research Excellence in Asbestos Related Diseases (CRE) 1001020 ($AUS 10,000 pa., $AUS 50,000 total). **M. J. Smyth**., B. Robinson (PI)
2013-2015	NH&MRC Project Grant (1044392) ($AUS 617,503): New molecules that regulate cancer immunity and therapy. **M. J. Smyth** and D. S. Ritchie.
2013-2015	NH&MRC Project Grant (1044392) ($AUS 617,503): New molecules that regulate cancer immunity and therapy. **M. J. Smyth** and D. S. Ritchie.
2011-2015	Centre for Research Excellence in Asbestos Related Diseases (CRE) 1001020 ($AUS 10,000 pa., $AUS 50,000 total). **M. J. Smyth**., B. Robinson (PI)
July 2014-Jun 2015	Bristol Myers Squibb ($AUS 95,382): The combination effect of anti-CTLA-4 and anti-RANKL. **M. J. Smyth.**
Apr 2010-Mar 2015	NH&MRC Australia Fellowship (628623) ($AUS 4,000,000): **M. J. Smyth.**
*2010-2013	Cancer Research Institute Post-doctoral Tumor Immunology Emphasis Program (educational program for PhD and MD students) ($US 450,000): **M. J. Smyth,** J. A. Trapani, J. McCluskey, D. I. Godfrey, A. Scott, and W. Chen.
Jul 2013-Jul 2014	MedImmune. Sponsored Research Agreement. Human anti-human CD73 antibodies. ($US 346,467) J. Stagg and **M. J. Smyth**.
2013	Australian Cancer Research Foundation (ACRF) Equipment Grant. The ACRF Centre for Comprehensive Biomedical Imaging ($AUS 2,600,000). G. R. Hill, **M. J. Smyth**, A. Boyd, K. Khanna, P. Parsons, S. Lane, A. Moller, K. MacDonald.
October 2013-	Costim Pty Ltd, Sponsored Research Agreement. Targeting Tim3 in cancer ($US 24,800).
Nov 2013-	Proof of Concept Award, QIMR Berghofer Medical Research Institute ($AUS 96,825). **M. J. Smyth** and L. Martinet
Jan 2014	Rio Tinto Ride to Conquer Cancer Research Grant 2013 (RTCC130008). The role of the atypical chemokine receptor CCRL1 in intra-tumor lymphoid neogenesis ($AUS 100,567). **M. J. Smyth** & C. Guillerey
Jan 2014	Rio Tinto Ride to Conquer Cancer Research Grant 2013 (RTCC130004).

	Combination of BRAF inhibitor and immunotherapies in BRAF-mutated melanoma ($AUS 102,024). **M. J. Smyth** & S-F. Ngiow
Apr 2014	2013 Weekend to End Women's Cancers Grant. Targeting suppressive TGF-βR, IL-10R and $A_{2A}R$ pathways in natural killer cells: enhancing the innate anti-metastatic response against breast cancer progression ($AUS 51,471). F.S.F Guimaraes & **M. J. Smyth**
2011-2013	Cancer Council Victoria (1003336): ($AUS 292,000): Immunoregulation of tumor microenvironment. **M.J. Smyth** & M.W. Teng.
2010-2013	Victorian Cancer Agency ($AUS 2,800,000 - $AUS 203,500 pa)(EOI09_71): Translational research program in sarcomas. D. Thomas, **M. J. Smyth**, N. Watkins and J. Desai.
2009-2012	Leukemia and Lymphoma Society. ($US 600,000) Extension to "A phase I study investigating the tolerability, safety and biological parameters of an infusion of autologous peripheral blood T lymphocytes transduced with an anti-LewisY chimeric receptor gene in patients with LewisY positive multiple myeloma." H. M. Prince, S. Peinhert, **M. J. Smyth,** L. Kravets, J. A. Westwood, P. K. Darcy, P. Neeson, D. Ritchie, M. H. Kershaw.
2012-2013	Victorian Cancer Agency, Scheme B Clinical Trials Capacity Building "Training the Next Generation of Translational Immunology Cancer Research Clinicians." ($AUS 250,000): D. Ritchie (**M. J. Smyth,** AI).
2012	Victorian Cancer Agency, Prostate Cancer Collaborative Research Grant, CAPTIV ($AUS 2,000,000). Consortium lead by M. Frydenburg, D. Pook, I. Davis, S. Williams, J. Millar, J. Pedersen, D. Murphy, N. Lawrentshuk, G. Risbridger, A. Costello, Y. Haupt, **(AI M. J. Smyth).**
2010-2012	NHMRC Project Grant 628302 ($AUS 662,000): "Novel mechanisms of inflammation amplified by lymphocytes." **M. J. Smyth** & D. M. Andrews.
*2009-2011	Pfizer TORCH grant ($AUS 110,00 p/a): Combining radiotherapy and monoclonal antibody therapy for the treatment of breast cancer. **M.J. Smyth,** N. M. Haynes.
2009-2012	Victorian Breast Cancer Consortium ($AUS 1,288,500): Development and testing of novel anti-breast cancer therapies. R. W. Johnstone, **M. J. Smyth**, R. Hannan, R. Pearson, S. Loi.
2007-2011	NH&MRC Program Grant (454569) ($AUS 2.162 million p/a ($AUS 10.81 million in total): Immune regulation, effector function and human therapy. J. A. Trapani, **M. J. Smyth**, R. W. Johnstone, D. I. Godfrey, and H. M. Prince.
*2008 (Nov19)-2011	Susan G. Komen Breast Cancer Foundation Program Grant (KG080035) ($US 600,000): 'Combination chemo-immunotherapy for established breast cancer'. **M. J. Smyth** and R. W. Johnstone.
*2010-2011	Amgen Research Agreement ($US 179, 919): Examination of the role of mIL-23p19 (p19) and mIL-12p40 (p40) in experimental and spontaneous models of tumour development. **M. J. Smyth** and M. W. L. Teng.
*2008 (Oct1)-2011	Association of International Cancer Research (183,000 pounds): 'Can the immune system and tumour be in a state of equilibrium.' **M. J. Smyth.**

*2007-2010	Cancer Research Institute Post-doctoral Tumor Immunology Emphasis Program (educational program for PhD and MD students) ($US 450,000): **M. J. Smyth,** J. A. Trapani, R. W. Johnstone, J. McCluskey, D. I. Godfrey, A. Scott, J. Cebon, I. Davis, S. Turner, T. Johns, and W. Chen.
2009-2010	Prostate Cancer Foundation of Australia ($AUS 300,344): Cell death and mobilizing immunity for the treatment of established prostate cancer. **M. J. Smyth** and R. W. Johnstone.
*2009-10	Amgen research Agreement ($US 223,179): Examination of the role of mIL-23p19 (p19) and mIL-12p40 (p40) in experimental and spontaneous models of tumour development. **M. J. Smyth** and M. W. L. Teng.
2008-2010	Cancer Council Victoria: ($AUS 300,000): Combined chemo-immunotherapies that eradicate established tumors. **M.J. Smyth.**
2009	Leukemia Foundation: ($AUS 100,000): Development of new therapeutic approaches to treat leukaemia and lymphoma. R.W. Johnstone, **M. J. Smyth.**
2007-2009	NHMRC Project Grant 458761 ($AUS 547,315): "Determining the mechanisms that regulate long-term anti-viral immunity." M. A. Degli-Esposti, & M. J. **Smyth.**
2007-2010	NHMRC Senior Principal Research Fellowship (454699) ($AUS 757,250): **M. J. Smyth.**
*2008	US Army Breast Cancer Concept Award ($US 75,000): **'**Role of CD73 (ecto-5-nucleotidase) in breast cancer and characterization of anti-CD73 monoclonal antibody (mAb) therapy'. **M.J.Smyth** & J. Stagg.
*2004-2008	National Institutes of Health (1R01CA106377) ($US 800,000): "The regulation of tumour immunity by NKT cells." **M. J. Smyth.**
*2007-2008	Novartis: ($AUS 368,000): Combination studies with LBH589 and the XIAP inhibitor LBW242 and the agonist anti-DR5 antibody MD5.1 with Novartis. R. W. Johnstone & **M.J. Smyth**
2005-2007	Leukemia and Lymphoma Society. ($US 600,000) "A phase I study investigating the tolerability, safety and biological parameters of an infusion of autologous peripheral blood T lymphocytes transduced with an anti-LewisY chimeric receptor gene in patients with LewisY positive multiple myeloma." D. Honemann, M.H. Kershaw, P. K. Darcy, **M. J. Smyth,** J. A. Trapani, M. Prince, D. Ritchie, D. Wall, R. Hicks, A.Scott
*2006-2008	Susan G. Komen Breast Cancer Foundation Program Grant (BCTR0600585)($US 250,000: 'Combination immunotherapy of established breast cancer'. **M. J. Smyth.**
2005-2007	Cancer Council Victoria: ($AUS 210,000): "TRAIL-mediated immunosurveillance, immunoselection and immunotherapy of cancer." **M.J. Smyth**
*2004-2007	Association of International Cancer Research (AICR 04-029) (125,000 pounds): "The double-edged sword of NKT cells in tumour immunity**." M. J. Smyth.**
2004-2008	NH&MRC Principal Research Fellowship (220015) ($AUS 456,813): **M. J. Smyth.**

2003-2007	NH&MRC Program Grant (251608) total $AUS 6.31 million awarded: 'Immune regulation, effector function and therapy.' **M.J. Smyth**, J. A. Trapani, R. W. Johnstone & D. I. Godfrey.
*2006	US Army Breast Cancer Concept Award ($US 75,000): **"**Characterization of the immune modulatory effect of regulatory T cells on NK cells during breast cancer for the development of novel therapeutic strategies". **M.J.Smyth** & J. Stagg
*2004-2006	Susan G. Komen Breast Cancer Foundation Program Grant (BCTR0402942) ($US 250,000): 'Immunogene therapy of breast cancer'. **M. J. Smyth.**
2004-2006	NH&MRC Project Grant (303024) ($AUS 447,750): "Dissecting the molecular effectors and regulators of anti-viral immune responses." M.A. Degli-Espoti, A.A. Scalzo, & **M. J. Smyth**
*2003-2007	Cancer Research Institute Predoctoral Emphasis Program in Tumour Immunology ($US 450,000): **M. J. Smyth.**
2003-2004	Glaxo Smith Kline. ($AUS 50,000): "The role of NKT cells in IL-18 anti-tumor activity." **M. J. Smyth**
*2001-2004	Human Frontiers in Science Program Grant (RGP0048/2001) ($US 750,000): 'Molecular mechanisms that control NK cell-mediated tumor surveillance' H.Yagita & **M. J. Smyth.**
*2002-2003	Susan G. Komen Breast Cancer Foundation Program Grant (BCTR0100396)($US 250,000): 'Immune control of breast cancer'. **M. J. Smyth.**
2002-2003	MSA Project Grant ($AUS 110,000): 'Natural killer cells: a novel mechanism of suppression of autoimmune demyelination and inflammation.' **M. J. Smyth.**
2001-2003	Anti-Cancer Council of Victoria Project Grant ($AUS 150,000): 'Immunotherapy of cancer using genetically engineered T cells ' P. K. Darcy, **M.J. Smyth,** & J.A. Trapani.
1999-2003	NH&MRC Principal Research Fellowship ($AUS 500,000): **M. J. Smyth.**
2002-2004	NH&MRC Project Grant (209021) ($AUS 255,000): 'What is the relative role of TNF-related apoptosis-inducing ligand (TRAIL) in tumor immunity?' **M. J. Smyth.**
2002-2004	NH&MRC Project Grant (209055) ($AUS 345,000). 'Novel approaches for activation and expansion of genetically modified T cells in vivo.' P.K. Darcy, **M. J. Smyth** & J. A. Trapani.
2002-2004	NH&MRC Project Grant (194252) ($AUS 240,000): 'NKT cells and tumour immunosurveillance.' D. I. Godfrey & **M. J. Smyth.**
2000-2002	NH&MRC Project Grant (118900) ($AUS 312,000): 'Analysis of the molecular functions of perforin: a critical role in tumor immunosurveillance' **M.J. Smyth** & J. A. Trapani.
1999-2003	NH&MRC Project Grant (990127) ($AUS 1,000,000): 'Natural killer cell-specific proteins and functions' **M. J. Smyth.**

*2002	The Wellcome Trust (UK): Equipment Grant. “Flow Cytometry Facility for Cancer Research” ($AUS 992,000): P. Simmons, P. Kaur, **M.J. Smyth**, R.W. Johnstone, L. Purton.
1999-2001	NH&MRC Project Grant (991065) ($AUS 216,000). 'Characterisation of the anti-apoptotic function of P-glycoprotein' R. W. Johnstone & **M. J. Smyth.**
1998-2000	Anti-Cancer Council of Victoria Project Grant ($AUS 237,000): 'The potential role of cytotoxic lymphocytes in tumour immunotherapy ' **M.J. Smyth,** P. K. Darcy & J.A. Trapani.
1998-2000	NH&MRC Project Grant (981916) ($AUS 237,000): The potential role of cytotoxic lymphocytes in tumour immunotherapy ' **M.J. Smyth,** P. K. Darcy & J.A. Trapani.
1998	University of Melbourne Awards for Joint Research Projects Scheme ($AUS 5,000) :"Effector mechanisms controlled by the natural killer cell gene complex." **M.J. Smyth,** A. Scalzo.
1997-99	NH&MRC Project Grant (971337) ($AUS 159,000): ' A structure/function analysis of cytotoxic lymphocyte perforin' **M.J. Smyth** & J. A. Trapani
1997-99	NH&MRC Project Grant (971336) ($AUS 215,000): ' The regulation and function of natural killer cell-specific granzymes' **M.J. Smyth**
*1994-98	Wellcome Trust Senior Research Fellowship in Medical Science. ($AUS 875,000): **M.J. Smyth**
*1998	The Wellcome Trust : Equipment Grant ($AUS 125,000): J. A. Trapani, **M. J. Smyth**
1995-97	Anti-Cancer Council of Victoria Project Grant ($AUS 174,000): ' A transgenic mouse model for lymphocyte-mediated therapy of cancer' **M.J. Smyth** & J.A. Trapani.
1995-97	NH&MRC Project Grant (950872) ($AUS 174,000): ' A transgenic mouse model for lymphocyte-mediated therapy of cancer' **M.J. Smyth** & J.A. Trapani
1994-96	NH&MRC Project Grant (940490) ($AUS 162,000): ‘Novel natural killer cell genes: characterisation and transcriptional control' **M.J.Smyth**
1995	Clive and Vera Ramaciotti Foundations: **M.J.Smyth** & B. McInnes
1993-94	Anti-Cancer Council of Victoria Project Grant: ' Tumour immunotherapy using cytolytic T cell subsets and bispecific antibodies' **M.J.Smyth** & J.A.Trapani
*1988-89	NIH Fogarty Research Grant: **M.J.Smyth** & J.R. Ortaldo.

Charitable grants:

2013-	ACRF ($2,600,000): “ACRF Centre for Comprehensive Biomedical Imaging” G. R. Hill, A. Moller, K. Khanna, S. Lane, A. Boyd, N. Waterhouse, **M.J. Smyth**
2007-2009	Peter Mac Foundation ($AUS 300,000): “Immunotherapy of kidney cancer.” M.H. Kershaw & **M.J. Smyth**

2006	Peter Mac Foundation ($AUS 100,000): ”Immunotherapy of kidney cancer.” **M. J. Smyth** & M.H. Kershaw.
2006	Peter Mac Foundation ($AUS 71,000): “Do wound healing genes control the tumour microenvironment.” **M. J. Smyth.**
2005	Helen McPherson Smith Trust ($AUS 105,000): “Anti-cancer blood cell transplantation initiative”. M. H. Kershaw & **M. J. Smyth.**
2003	The John T Reid Charitable Trust ($AUS 250,000): “Gene Transfer Suite”. M. H. Kershaw, P. K. Darcy & **M. J. Smyth.**
1997	The Ian Potter Foundation: Equipment Grant $AUS 125,000 (Irradiator): I. F. C. McKenzie, V. Apostolopoulos, J. A. Trapani, **M. J. Smyth**

Memberships of Scientific Societies/Committees:

Australasian Society for Immunology (1992-)

The Transplantation Society of Australia and New Zealand (1992-2000)

The American Association of Immunologists (1995-)
Natural Society for Immunity (1999-2007)
The Australian Society for Medical Research (1999-2006)
The International Society for Interferon and Cytokine Research (2002-2008)
The Society for Leukocyte Biology (2004-2011)
The American Society for Biochemisty and Molecular Biology (2004-2010)

NH&MRC Discipline Panel Member 1998, 2000, 2004, 2005
ACCV National Assigning Panel Member 1998-1999
ASI State Councillor 2000-2003
IgV Council Member 1995-2007
NH&MRC Research Fellowships Committee 2011, 2013
NH&MRC Career Development Award Panel Member (2006, 2007, 2008-Chair, 2009, 2012).
PCFA Grants Committee 2012, 2013-
Scientific Advisory Board of the Cancer Research Institute

Peer review involvement:

I have been a regular reviewer of national (NH&MRC, Cancer Council, etc.) and international (NIH, EuroCom, CRC, HFSP, Wellcome etc.) peer-reviewed grants for 15 years. In the past I have reviewed Program grants for the European Commission and RO1 for the NIH as an ad-hoc reviewer to the TTT study section. Over the past five years I have had a large number of invitations to review international fellowships, projects and programs from a variety of countries (see below). I have been a member of the NH&MRC Project Grants Discipline Panel (DP) in Immunology, on Research Fellowships and CDA panels, and served as an Assigning Panel member of the National Cancer Councils. My international profile is also supported by numerous invitations to review for and publish reviews/commentaries in leading journals including Science, Nature, Nature Immunology, Nature Medicine, Nature Reviews Cancer, Nature Reviews Immunology, Immunity, J. Exp. Med., BLOOD, Trends in Immunology, Current Opinions in Immunology and Journal of Immunology. For many of these journals, particularly Nature, Nature Immunology, Immunity, JCI, J. Exp. Med, Journal of Immunology, J. Biol. Chem. and BLOOD, I am a regular expert reviewer. I was an Editorial Board Member at the Journal of Biological Chemistry (2005-2010). I am a current Editorial Board member at Immunotherapy, Cancer Immunity, Clinical and Translational Immunology and OncoImmunology. I am a Section Editor at the Journal for Leukocyte Biology, Senior Editor at Cancer Research, and a member of the Faculty of 1000. I am on the Scientifc Advisory Board of the Cancer Research Institute since 2012.

Faculty of 1000 member (Immunology) (2004-2012, 2013-)
Consulting Editor: The Journal of Leukocyte Biology (1997-00).
Editorial Board: The Journal of Biological Chemistry (2005-2010).
Editorial Board: Cancer Immunity (2012-ceased).
Invited Section Editor: Current Opinions In Immunology (2007).
Invited Section Editor: Current Opinions In Immunology (2011).

Editorial Board Member: Science (2016-)
Senior Editor: Cancer Research (2009-).
Section Editor: The Journal of Leukocyte Biology (2004-).
Editorial Board: Immunotherapy (2008-).
Editorial Board: Oncoimmunology (2010-).
Editorial Board: Cancer Immunology Research (2013-).
Editorial Board: Clinical and Translational Immunology (2012-).
Editorial Board: Molecular and Cellular Oncology (2013-).
Associate Editorial Board: Frontiers in Molecular and Cellular Oncology (2010-).

Invited Founding International Member:
European Research Institute for Integrated Cellular Pathology (ERI-ICP)(2010-).
Member of the European Academy of Tumor Immunology (2010-).

National Committees:
NH&MRC Discipline Panel Member Immunology (1998, 2000, 2004, 2005).
NH&MRC Discipline Panel Member Cancer/Oncology (2012 – invited/declined)
NH&MRC Career Development Award Panel Member (2006, 2007, 2008-Chair, 2009, 2012).
NH&MRC Research Fellowships Committee (2011).
National Cancer Councils (for ACCV) Assigning Panel Member (1998, 1999).
Health Research Council of New Zealand (2009 Invited).
Cancer Australia's Priority Driven Collaborative Cancer Research Scheme (2012 – invited/declined)
Prostate Cancer Foundation of Australia Grants Committee (2012-)

Annual Review of National Project Grant Applications for:
NH&MRC of Australia (1992-current) (2-6 per year).
National Cancer Councils of Australia (1992-current) (1-5 per year).
University of Sydney, Cancer Research Fund (1994-2000) (1-2 per year).
The Leo & Jenny Leukemia & Cancer Foundation (1995-2008) (1 per year).
Cure Cancer Australia (2007-2011)(2 per year).
Sydney Cancer Centre (2006-2007)(1-2 per year).

Occasional Review of National Project Grant Applications for:
The Raine Foundation (1996, 1998, 2010).
Diabetes Australia Research Trust (1999).
The Thoracic Society of Australia and New Zealand (1999).

Review of Program, Research Fellowship or Training Applications for:
NH&MRC of Australia (1/yr).
The Wellcome Trust (1/yr).
John Curtain School of Medical Research (several).
JDRF Diabetes Vaccine Development Centre.
NIH Tenure (ad hoc).

Occasional Review of International Program/Project Grant Applications for:
European Commission Framework Program Grants (2004, 2005)
European Research Council (2010, 2012)

NIH Ad Hoc Study Section (TTT, Experimental Immunology) (2004, 2005)
Swiss National Science Foundation (2005)
France National Cancer Institute (2005, 2008)
French National Research Agency (2009, 2010)
Israel Science Foundation (2005, 2009, 2010)
The Wellcome Trust (United Kingdom) (1996-2014).
University of Pittsburgh, Pennsylvania (USA) (1994).
National Institutes of Health (NIH) RO1 Project Grants (USA) (1999-2004).
Associazione Italiana per la Ricerca sul Cancro (2000, 2001, 2003, 2004, 2010).
Biomedical Research Council of Singapore (2001).
The Cancer Research Campaign (2000, 2002, 2004).
Guy's & St Thomas' Charitable Foundation (2002).
Irish Health Research Board (2002, 2012, 2013).
The Royal Society of New Zealand – Marsden Fund (2002, 2003, 2012).
The Netherlands Organisation for Health Research and Development (ZonMw) (2002, 2012, 2013).
Science Foundation Ireland (2002, 2003).
The MRC (UK) (2004, 2009, 2010, 2011).
The Association for International Cancer Research (2006, 2007, 2008, 2009, 2010).
Austrian Research Fund (2009)
Health Research Council of NZ (2009, 2010, 2011, 2012)
Agency for Science, Research & Technology (A*STAR)(2010, 2011)
Singapore Immunology Network (2009)
Swiss Cancer League (2009)
The Dutch Cancer Society (2010)
The Erwin Schroedinger Foundation, Austrian Science Fund (2010)
Genesis Oncology Trust NZ (2010, 2011)
BBSRC (2011)
Cancer Research UK's New Agents Committee (NAC) (2012)
Skolkovo Foundation (Russia) (2012)
Auckland Medical Research Foundation (2013)
The Kay Kendall Leukemia Fund (2014)
National Science Centre (Poland) (2014)
Italian Ministry of Health (2015)
NBCF Innovator Grants Peer Review Committee (2016)
Technology Foundation STW (Netherlands) (2015)
Unity through Knowledge/Croatian Science Fund (2015)

Regular (≥ 5/year) Manuscript Reviews for:
Nature Immunology (2001-)
The Journal of Experimental Medicine (2000-)
The Journal of Immunology (1995-)
BLOOD (1998-)
The Journal of Biological Chemistry (2002-2005)
Nature (2006-)
Cancer Research (1998-)
Cancer Cell (2006-)
Journal Leukocyte Biology (2000-)
Journal of Clinical Investigation (2007-)
Cancer Immunology Research (2012-; 25/06/13)

Occasional (between 20-30 over last 10 years) Manuscript Reviews for:
Cell
Science
Nature Medicine
Immunity
Proceedings of The National Academy of Sciences, USA

Infrequent (between 1-5 over last 10 years) Manuscript Reviews for:
Nature Communications (25/06/13)
Science Translational Medicine
Molecular and Cellular Biology
PLOS ONE
Nature Cell Biology
Journal of the National Cancer Institute
Cell Death and Differentiation
International Immunology

Immunology Today/Trends in Immunology
Clinical Cancer Research
Oncogene
Immunology and Cell Biology
European Journal of Immunology
Natural Immunity, Cytokine, The Journal of Laboratory and Clinical Medicine, Immunogenetics, International Journal of Cancer, British Journal of Cancer, Journal of Molecular Biology, Xenotransplantation, Brain Research, Journal of Gene Therapy. American Journal of Pathology, Cancer Letters, Tissue Antigens, Expert Opinion on Biological Therapy, Trends in Pharmacological Sciences, Trends in Biochemical Sciences, Journal of Investigative Dermatology, Molecular Medicine, Immunobiology, Hepatology, Melanoma Research

Examined a total of more than 10 PhD theses since 1993 for:
University of Newcastle
University of Western Australia
University of Melbourne
Monash University
University of Sydney
University of Queensland

Opponent: PhD Thesis Gustaf Vahlne, Karolinska Institute, Stockholm, Sweden, 2007

Consultancy: I was a paid consultant to the Ludwig Institute for Cancer Research concerning the monitoring of cellular immune responses of melanoma patients enrolled in a series of vaccine trials at the Ludwig Oncology Unit at Austin and Repatriation Medical Centre (1997 to 1999). These trials involved synthetic melanoma peptide antigens administered either alone or co-administered with immune adjuvants such as GM-CSF or IL-12. The trials were conducted collaboratively in several centres internationally, including New York, Frankfurt and Lausanne. I provided expertise in innate and acquired immunity and the design of effective surrogate assays for clinical immune responses.

I have been a consultant/advisor to Novo Nordisk for the clinical development of IL-21 from 2004-2008. We have a basic pre-clinical program of IL-21 research in my group that funding two visiting scientists from Novo Nordisk.

I have been a founder and consultant to Cytoscreen Pty Ltd. since 2003

I have been a consultant for Genscreen Pty Ltd. since 2004.

I have been a consultant to Cynata Pty Ltd. since 2005.

Consult ad-hoc for Defined Health (USA).

Expert Advisory Board – Boehringer Ingelheim (2011).
Expert Advisory Board – Bristol-Myers Squibb (2011).
Expert Advisory Board – GSK (2011-2012).

Expert Advisory Board – AMGEN (2015).
Scientific Advisory Board of F-star (2013-).
Scientific Advisory Board of Kymab (2014-).
Scientific Advisory Board Arcus Biosciences (2016-).
Scientific Advisory Board Astra Zeneca (2016-).

Consultant to AMGEN (2009-2012).
Consultant to Ablynx (2011-2012).
Consultant to Merck (2012).
Consultant to Five Prime Therapeutics (2013-2014).
Consultant to Janssen (2013).
Consultant to Compugen (2014).
Consultant to Heat Biologics (2014).
Consutant to Gerson Lehrman Group (2013-).
Consultant to Aduro Biotech (2015-).
Consultant to Bristol Myers Squibb (2015-).
Consultant to Inception Sciences (2016-).

Meetings organised:

1998 Australasian Society of Immunology Meeting, Melbourne.
2000 Immunology of Victoria, Mt Buffalo
2001 Immunology of Victoria, Mt Buffalo
2002 Immunology of Victoria, Beechworth
2003 Immunology of Victoria, Beechworth
2003 5th Peter Mac Symposium, Melbourne
2004 3rd International CD1 and NKT cell workshop, Heron Island.
2005 Apoptosis and Immunology, Palm Cove (May/June)
2005 Australasian Society for Immunology/14th International HLA Immunogenetics Conjoint Meeting, Melbourne (Dec).
2005 Advisory Committee, 21st International NK cell workshop, Hawaii, November.
2006 6th International Cytokine Meeting, Vienna – International Advisory Board.
2008 Organizing Committee, 23rd International NK cell Workshop, Perth, November.
2010 AACR Annual Meeting Scientific Program Committee
2011 Keystone Symposia Program Chair
2011 Annual Meeting of ISBTc, Worshop on Combination Immunotherapies, Bethesda, MD, USA, Nov 3-6th.
2011 Immunotherapy Program Visit, BMS, August 17th.
2012 Scientific Advisory Committee of International Workshop on the Mathematical Modelling of Tumour:immune Dynamics, Sydney, Australia, Jan 7-10th, 2012.
2015 Immunotherapy@Brisbane 2015, Nov 24-26, 2015, Brisbane Australia – Scientific Program Chair
2016 Scientific Program Committee for the International Congress of Immunology, Melbourne, 2016.
2017 Immunotherapy@Brisbane 2017, May 10-12, 2015, Brisbane Australia – Scientific Program Chair

Involvement in wider community:

Public Education:

1989-1990: While I was training at the Frederick Cancer Research and Development Center, NCI, USA, I was involved in a special initiative in Maryland to expose high school students to leading medical research. I supervised Mr. Jeffrey Gerard (20 hrs/week). He was one of the first ten high school students selected for the Student Intern Program within Maryland.

1994: Talk at Rotary Lions Club of Heidelberg, October.
1995: Talk at Rotary Lions Club of Rosebud, November.
1997: Talk at Rotary Lions Club of Nunawading, April
1998: Talk at Austin Research Institute Public Information Night, August. "CANCER - from every perspective."
1999: The Sir Macfarlane Burnet Live-In Workshop for VCE level, University of Melbourne, July.
2004: Research presentation at Peter Mac Cup Breakfast (Carlton v Collingwood), Park Hyatt, May.
2004: Peter Mac Staff Forum, June, 2004
2010: Cancer Council Victoria Sponsors Day, June 23, 2010
2014: Public Forum – QIMR Berghofer, Cancer Immunotherapy Awareness Month, June 17, 2014
2015: Public Forum –Immunotherapy@Brisbane, November 24, 2015

Occasional written, verbal and documentary presentations of my research to public via mass media [New York Times, Washington Post, The Age, Canberra Times, ABC radio, ABC TV (Quantum)], Channel 10, and smaller outlets (Local radio stations, Today's Life Sciences).

Regular presentations of scientific articles to Peter MacCallum Fundraising Department.

November 18-24th 2007. Nature paper. Channel 9 and 10 national news story. Herald Sun weekly and Weekend releases. Worldwide media release via AAP.

January 28th, 2010: NH&MRC Australia Fellowship announcements.

May 29th, 2012: CCV Cancer News Interview and Article

http://www.healthcanal.com/cancers/17196-Breast-cancer-new-treatment-avenue.html

http://scicasts.com/lifesciences/1875-cancer-research/3649-new-treatment-avenue-for-breast-cancer-identified

http://medicalxpress.com/print224836365.html

http://www.canadianbusiness.com/article/25935--breast-cancer-a-new-treatment-avenue-identified-at-the-crchum-and-the-peter-maccallum-cancer-centre

http://www.newswire.ca/en/releases/archive/May2011/17/c4666.html

http://news.bioscholar.com/2011/05/new-avenue-for-treating-breast-cancer-identified.html

http://www.medicalnewstoday.com/releases/225658.php

http://oneclick.indiatimes.com/article/0gYx5QfgcD6K1

http://www.medicalnewstoday.com

http://www.medilexicon.com

Medical News Today Article Publication (Article ID: 228470)

http://www.healthcanal.com/medical-breakthroughs/18099-New-cell-type-offers-new-hope.html

http://www.biotechnologynews.net/StoryView.asp?StoryID=2393964

http://www.cosmosmagazine.com/news/4445/australian-scientists-discover-new-immune-cell

http://www.abc.net.au/rn/healthreport/
http://aww.ninemsn.com.au/olay/tips/8479450/stress-and-your-immune-system-listen-to-your-body

Herald Sun August 12, 2012 (online and in press).
http://www.skynews.com.au/health/article.aspx?id=815457

http://au.news.yahoo.com/queensland/a/-/local/17669778/enzyme-blocker-offers-breast-cancer-treatment-boost/
http://www.abc.net.au/news/2013-06-19/enzyme-blocker-offers-breast-cancer-treatment-boost/4766532?section=qld

http://www.abc.net.au/news/2013-08-18/riders-conquer-nations-biggest-charity-ride/4895022?section=qld

March 24, 2014
http://www.theaustralian.com.au/news/latest-news/aussies-reveal-how-cancer-tricks-the-body/story-fn3dxiwe-1226862806111
http://www.businessinsider.com.au/australian-researchers-have-found-that-cancer-cells-use-camouflage-to-trick-our-bodies-2014-3
http://www.heraldsun.com.au/news/breaking-news/aussies-reveal-how-cancer-tricks-the-body/story-fni0xqi4-1226862806111
http://health.msn.co.nz/healthnews/8818772/aussies-reveal-how-cancer-tricks-the-body
http://au.news.yahoo.com/a/22132455/aussies-reveal-how-cancer-tricks-the-body/
http://www.news.com.au/lifestyle/health/aussies-reveal-how-cancer-tricks-the-body/story-fneuzlbd-1226863179442
http://www.perthnow.com.au/news/breaking-news/aussies-reveal-how-cancer-tricks-the-body/story-fnhrvfuw-1226862806111
http://www.prostate.org.au/research/funded-research/meet-our-investigators/

Invitations to Speak at International Scientific Meetings:

1989: Second International Workshop on Cytokines, Hilton Head Island, SC, USA, Dec. 1989. "IL-2 induction of perforin mRNA expression in human lymphocyte subsets."

1991: First International Symposium on Combination Therapies, Washington D.C., USA, March 1991. "Immunosuppression in tumor bearing mice: functional and molecular basis."

1992: Natural Killer Cell Workshop- Molecular and Cellular Aspects of Natural Killer Cell Triggering and Signalling, St. Petersburg Beach, Florida, USA, Oct. 1992. "Purification and cloning of a novel serine protease with Met-ase activity from the granules of a rat natural killer cell line."

1993: European Molecular Biology Organisation Workshop on Cell-Mediated Cytotoxicity, Neve Ilan, Israel, August, 1993. "Purification and cloning of a novel granzyme activity from natural killer cells."

1994: Second Meeting of The Society for Natural Immunity, Taormina, Italy, May, 1994. "Granule serine proteases of natural killer cells localise to the nucleus of target cells."

1995: The First International Granzyme Conference, Reno, NE, USA, March, 1995. "A LGL granzyme: control of transcription, expression and activation."

1997: European Molecular Biology Organisation Workshop on Cell-Mediated Cytotoxicity, Kerkrade, The Netherlands, April, 1997. "The role of perforin in tumor xenograft rejection by adoptive transfer and FasL in allogeneic bystander lysis."

1998: Fifth Meeting of The Society for Natural Immunity, Warrenton, Virginia, October, 1998. " NK cell-mediated tumor rejection in vivo: a role for TNF in cell movement."

1999: Inaugural Workshop on NK T cells and CD1-mediated antigen presentation, San Diego, April, 1999. "The role of NK and NKT cells following tumor or xenoantigen challenge in vivo."

2000: International Symposium on Cancer Immunosurveillance, Cancer Research Institute, New York City, NY, USA, October, 1999 (SYMPOSIUM).

2000: The 18th International Natural Killer Cell Workshop, 6th Annual Meeting of the Society for Natural Immunity, Marseille, France, May 2000. " Innate immunity, effector mechanisms and cancer in mice."

2001: International Congress in Immunology, Stockholm, Sweden, July, 2001 (SYMPOSIUM).

2002: First Wellcome International Senior Fellows Meeting, London, UK, May, 2002.

2002: Cancer Research Institute 16th Annual Awards Dinner, New York, NY, May 2002.

2002: FASEB Meeting on Apoptosis and Immunity, Tuscon, AZ, USA, July 2002 (SYMPOSIUM).

2002: Cancer Research Institute CVC Symposium, New York, NY, USA October 2002 (SYMPOSIUM)

2002: The 19th International Natural Killer Cell Workshop, San Juan Puerto Rico, October, 2002 (SYMPOSIUM).

2002: The 9th International Congress on the TNF Related Cytokines, San Diego, CA, October, 2002.

2002: The Second International CD1 and NKT cell Workshop, Woods Hole, USA, November, 2002 (SYMPOSIUM).

2002: The Japanese Society for Immunology Annual Meeting, Tokyo, Japan, December, 2002 (SYMPOSIUM).

2003: International Symposium on Tumor Biology, Kanazawa, Japan, March, 2003 (PLENARY).

2003: IL-13 and Related Factors in Inflammation and Disease, Cape Town, South Africa, March, 2003 (INVITED/declined).

2003: The American Association of Immunologists, Denver, CO, USA, May, 2003 (SELECTED).

2003: The European Network of Immunology Institutes, Ile des Embiez, France, May, 2003 (SYMPOSIUM).

2003: The Annual Meeting of the Korean Cancer Association, Seoul, South Korea, June, 2003 (PLENARY). "Cancer immunosurveillance."

2003: Sapporo International Cancer Symposium, Sapporo, Japan, July, 2003 (SYMPOSIUM).

2003: The International Society for Interferon and Cytokine Research, Cairns, October, 2003 (PLENARY).

2004: Indo-Australian Conference on Biotechnology in Medicine, Indian Institute of Science, Bangalore, India, February 9-11, 2004 (PLENARY/declined).

2004: NIH Seminar Series, Bethesda, MD, USA, April, 2004

2004: University of Connecticut Health Center Seminar Series, New Haven, CT, USA, April, 2004 (INVITED LECTURE SERIES).

2004: The 20th International Natural Killer Cell Workshop, Noordwijkerhout, The Netherlands, April, 2004 (SYMPOSIUM).

2004: 4th HFSP Annual Awardees Meeting, Hakone, Japan, May, 2004 (INVITED SYMPOSIUM - declined).

2004: International Congress in Immunology, Montreal, Canada, July, 2004 (INVITED WORKSHOP CHAIR).

2004: 3rd International Workshop on NKT cells and CD1 mediated antigen presentation, Heron Is, Australia, September, 2004 (INVITED SYMPOSIUM).

2004: Genomics, Proteomics and Therapeutics in Cancer Research, Hong Kong, October, 2004 (INVITED PLENARY & SYMPOSIA). "Innate effectors and regulators of tumor immunity."

2005: Seventeenth Lorne Cancer Conference, Lorne, February, 2005 (INVITED). "Innate effectors and regulators of tumor immunity."

2005: Basic Aspects of Tumor Immunology, Keystone Symposia, Keystone, CO, March 2005 (INVITED SYMPOSIUM - declined).

2005: Apoptosis and Immunity, Palm Cove, Cairns, June 2005 (INVITED SYMPOSIUM)

2005: 7th International Symposium on Cytokines and Chemokines, Montreal September 8-9, 2005 (INVITED SYMPOSIUM – declined).

2005: The Annual Meeting of the Korean Cancer Association, Seoul, South Korea, June, 2005 (INVITED PLENARY). “Cancer immunosurveillance.”

2005: The Joint Meeting on IL-21, Copenhagen, Denmark, September, 2005 (INVITED SPEAKER)

2005: 1st Crossroads between Innate and Adaptive Immunity Conference, Rhodes, Greece, October 2005 (INVITED PLENARY). “Cancer immunosurveillance.”

2005: International Symposium on Cancer Vaccines. Barriers, Endpoints, and Opportunities, Cancer Research Institute, New York City, NY, USA, October, 2005 (INVITED PLENARY). “Cancer immunosurveillance.”

2006: Immunet, Wellington, NZ, June, 2005 (INVITED PLENARY – declined)

2006: Sapporo International Cancer Symposium, Sapporo, Japan, July, 2006 (INVITED PLENARY - declined).

2006: Pasteur Institute Spring Seminar Series, Paris (INVITED SPEAKER –declined).

2006: 6th International Cytokine Meeting, Vienna, Austria, August, 2006 (INVITED CHAIR AND SYMPOSIUM SPEAKER).

2006: National Cancer Institute "Frontiers in Basic Immunology", Bethesda, MD, September 2006 (INVITED PLENARY - declined).

2006: 4th International Workshop on NKT cells and CD1 mediated antigen presentation, Tuscany, Italy, October, 2006 (INVITED SYMPOSIUM - declined).

2006: Annual Meeting of the International Society of Biologic Therapy of Cancer, Los Angeles, CA, October, 2006 (INVITED CHAIR AND SPEAKER).

2006: International Workshop Immunotherapy: targeting complexity, Havana, Cuba, November, 2006 (INVITED SPEAKER - declined).

2006: Inaugural European Cell Death Organization (ECDO) Workshop, Villejuif, France, December, 2006 (INVITED PLENARY - declined).

2007: Keystone Symposia "Mechanisms Linking Inflammation and Cancer", Santa Fe, NM, February, 2007 (INVITED SYMPOSIUM).

2007: Keystone Symposia "The Powerful New Anti-tumor Immunotherapies.", Banff, Canada, March 2007 (INVITED SYMPOSIUM - declined).

2007: Charles Rodolphe Brupbacher Symposium, Zurich, Switzerland, March 2007 (PRIZE AND INVITED PLENARY).

2007: 10th NK cell Workshop, Cambridge, UK, April, 2007 (INVITED SYMPOSIUM-declined).

2007: 7th International Conference on Progress in Vaccination Against Cancer (PIVAC-7), Stockholm, Sweden, September 2007 (INVITED PLENARY - declined).

2007: NCI, Frontiers in Basic Immunology, Bethesda, MD, USA, October, 2007 (INVITED PLENARY).

2008: Keystone Symposium, NK and NKT cell biology, Keystone, CO, USA, February, 2008 (INVITED SYMPOSIUM).

2008: CIMT, Cancer Immunotherapy, Mainz, May 15-16th, 2008, Germany (INVITED PLENARY-declined)

2008: EMBO Workshop, Cytotoxicity, Cell Death and the Immune System, Zaragosa, Sept 17-20, 2008, Spain (INVITED SYMPOSIUM -declined)

2008: Cancer Research Institute 16th Annual Meeting, Cancer Immunology and Immunotherapy 2008: From Discovery to Development to Drug, New York, New York, USA, Sept 15-17, 2008 (INVITED PLENARY)

2008: 13th World Congress on Advances in Oncology, Creta Maris, Hersonissos, Crete, Greece, Oct 9-11th, 2008 (INVITED SPEAKER – declined).

2008: 11th Meeting of the Society for Natural Immunity, Fremantle, Australia, October, 2008 (INVITED SYMPOSIUM).

2008: 1st International Conference on Anti-cancer Chemo-immunotherapy, Paris, France Oct 17-18, 2008 (INVITED OPENING PLENARY).

2008: 8th International Conference of Anticancer Research, Kos, Greece Oct 17-22, 2008 (INVITED PLENARY – declined).

2008: AACR Special Conference, Tumor Immunology:New Perspectives, Miami, USA Dec 2-5, 2008 (INVITED SYMPOSIUM - declined).

2008: International Workshop "Immunotherapy 2008: Implementing combinations", Havana, Cuba, November 10-14, 2008 (INVITED SPEAKER - declined).

2009: Keystone Symposium, Mobilizing Cellular Immunity for Cancer Therapy, Snowbird, UT, USA, January, 2009 (INVITED SYMPOSIUM)."Combination chemo-immunotherapies: looking for synergy."

2009: Twenty-first Lorne Cancer Conference, Lorne, Australia, February, 2009 (INVITED SYMPOSIUM).

2009: 5th International Symposium on the Clinical Use of Cellular Products, Nurnberg, Germany, March 19-20, 2009 (INVITED SYMPOSIUM – declined)

2009: 5th International Symposium on CD1/NKT cells, Kamakura, Japan, March, 2009 (INVITED SYMPOSIUM)

2009: The Second Australia-China Biomedical Research Conference, Tianjin, China, April 24-27, 2009 (INVITED SPEAKER – declined).

2009: 3rd Annual Immunodiagnostics and Immunomonitoring Conference, Chicago, IL, April 23-24, 2009 (INVITED SPEAKER – declined).

2010: Keystone Symposium, Role of Inflammation in Oncogenesis, Keystone, CO, USA, Feb 7-12, 2010 (INVITED SYMPOSIUM). "Suppression and innate immune surveillance."

2010: The 2010 Miami Winter Symposium, "Targeting Cancer Invasion and Metastasis", Miami, FL, Feb 21-24, 20010 (INVITED SYMPOSIUM). "Finding a balance: cancer and immunity."

2010: The AACR Annual Meeting, Washington DC, USA, April 17-21, 2010 (INVITED SYMPOSIUM SPEAKER)."Pathways that suppress tumor immunity."

2010: The 12th Meeting of The Society for Natural Immunity, Cavtat, Croatia, April 20-24, 2010 (INVITED SPEAKER). "Therapeutic and functional properties of DNAM-1/CD96 in immune responses to tumors."

2010: International Congress in Immunology, Kobe, Japan, Aug 22-27th, 2010 (INVITED SPEAKER). "Finding a balance between cancer and immunity."

2010: International Symposium on Tumor Biology, Kanazawa, Japan Aug 27-29th, 2010 "Cancer and host response" (INVITED SYMPOSIUM SPEAKER).

2010: Brazilian Society for Immunology, Porto Alegre, Brazil, Nov 3-6th 2010 (INVITED SYMPOSIUM SPEAKER - declined).

2011: Keystone Symposium "Antibodies as Drugs" Keystone, CO, USA, Feb 6-11th(INVITED SYMPOSIUM).

2011: Keystone Symposium "Cancer Control by Tumor Suppressors and Immune Effectors" Santa Fe, NM, USA, Feb 12-17th 2011 (INVITED SYMPOSIUM).

2011: 3rd Australia-China Biomedical Research Conference, April 28-30th (INVITED SYMPOSIUM - declined)

2011: "Immunochemotherapy: Correcting Immune Escape in Cancer" Mar 10-11th, 2011 (INVITED PLENARY).

2011: 6th International Symposium on Cellular Therapy, Erlangen, Germany, Mar 24-25th (INVITED SYMPOSIUM - declined).

2011: 6th International Symposium on CD1d/NKT, Chicago, USA, Sept 23-27, 2011 (INVITED SYMPOSIUM).

2011: Boehringer Ingelheim Expert Meeting on Immunotherapy, New York City, New York, Oct 6-7, 2011 (INVITED SPEAKER).

2011: Bristol Myers Squibb Immunooncology Advisory Board Meeting, Bethesda, MD, Nov 2, 2011 (INVITED)

2012: The 13th Meeting of The Society for Natural Immunity, Asilomar, CA, USA, April 20-24, 2012 (INVITED SPEAKER).

2012: IMPAKT 2012 Breast Cancer Conference, "Develpment of immunotherapeutic approaches in TNBC", Brussels, Belgium, May 2, 2012 (INVITED SPEAKER).

2012: IMPAKT 2012 Breast Cancer Conference, Interrogating the immune system", Brussels, Belgium, May 4, 2012 (INVITED SPEAKER).

2012: European Academy of Tumor Immunology Conference, "NK cells in malignancy", Paris, France, May 7, 2012 (INVITED SPEAKER).

2012: Antibody Design and Discovery Conference, San Diego, USA, Jun 7-8, 2012 (INVITED SPEAKER, declined).

2012: 5th International Symposium of Immunology, Singapore, Jun 7-8, 2012 (INVITED SPEAKER).

2012: European Human Genetics Conference (ESHG), Nurnberg, Germany, June 24-26, 2012 (INVITED SPEAKER - declined). "Cancer Genetics".

2012: European Congress of Immunology, LFB Satellite Symposium, "The immunomodulatory activities of therapeutic antibodies, from preclinical studies to clinical trials", Sept 6-8th, 2012 (INVITED SPEAKER).

2012: NK cell Symposium, Heidelberg, Germany, Sept 26-28th, 2012 (INVITED SYMPOSIUM).

2012: World Congress on Advances in Oncology, Creta Maris, Hersonnis, Crete, Greece, Oct 11-13th, 2012 (INVITED TALK – declined).

2012: Annual SITC Meeting, Bethesda, Oct 26-28th, 2012 (INVITED SYMPOSIUM CHAIR & PLENARY SPEAKER – declined).

2012: AACR Special Conference. Tumor Immunology: Multidisciplinary Science Driving Basic and Clinical Advances. Miami, USA, Dec 2-6, 2012 (INVITED SPEAKER – declined).

2012: International Workshop on the Mathematical Modelling of Tumour:Immune Dynamics, Sydney, Australia, Jan 7-10th, 2012 (INVITED PLENARY - declined).

2013: Keystone Symposium "Cancer Immunology and Immunotherapy", Vancouver, Canada, Jan 27-Feb 1, 2013 (INVITED SYMPOSIUM - declined).

2013: IMPAKT 2013 Breast Cancer Conference, Interrogating the immune system", Brussels, Belgium, May 1-4, 2013 (INVITED CHAIR & SPEAKER - declined).

2013: Cancer Immunotherapy Consortium, Washington DC, April 25-27, 2013 (INVITED SYMPOSIUM).

2013: The Roche Nature Medicine Immunology Symposium, Buonas, Switzerland, April 28-30, 2013 (INVITED SYMPOSIUM - declined).

2013: International Congress of Immunology, Aug 22-27, 2013 (INVITED SYMPOSIUM - declined).

2013: Annual Joint Meeting of the International Cytokine Society (ICS) and InternationalSociety for Interferon and Cytokine Research (ISICR), San Francisco, CA, USA, Sept 29-Oct 3, 2013 (INVITED SYMPOSIUM - declined).

2013: The 17th ECCO - 38th ESMO - 32nd ESTRO European Cancer Congress *: Reinforcing Multidisciplinarity,* Amsterdam, The Netherlands, Sept 27-Oct 1, 2013 (INVITED CHAIR AND SYMPOSIUM SPEAKER – declined).

2013: XIII Michelangelo Seminar, Breast Cancer, the immune system, and new therapeutic opportunities, Milan, Italy, Oct 25, 2013 (INVITED PLENARY - declined).

2013: Cold Spring Harbor Asia Conference on Cancer Immunology and Immunotherapy, Suzhou, China, Oct 28-Nov 1, 2013 (INVITED SYMPOSIUM).

2013: IBC Antibody Engineering Meeting, "The Interface between monoclonal antibody and cellular immunity in cancer", Huntington Beach, CA, Dec 8-12, 2013 (INVITED SYMPOSIUM-declined).

2014: 5th Australasian Vaccines and Immunotherapeutic Development Meeting, Melbourne, Australia, May 7-9, 2014 (INVITED SPEAKER).

2014: CIMT 12th Annual Meeting 2014, Mainz, Germany, May 6-8, 2014 (INVITED PLENARY)

2014: Kymab Scientific Experts Meeting, Cambridge, Sept 8-9, 2014 (INVITED SYMPOSIUM).

2014: Annual General Meeting of the International Cytokine and Interferon Society, Melbourne, Oct 26-29, 2014 (INVITED SYMPOSIUM).

2014: Boehringer Ingelheim Experts Meeting, Vienna, Nov 23-24, 2014 (INVITED SYMPOSIUM).

2015: 4th Network of Immunology Frontier Winter School, Singapore, Jan 18-23, 2015 (INVITED SYMPOSIUM).

2015: 27th Lorne Cancer Conference, Lorne, Australia, Feb 12-15, 2015 (INVITED PLENARY). Ashley Dunn Oration

2015: 4th International Conference on Immunochemotherapy, Philadelphia, Apr 16-17, 2015 (INVITED PLENARY).

2015: Annual AACR Meeting, Philadelphia, Apr 18-22, 2015 (INVITED SYMPOSIUM).

2015: NK 2015, 15th Meeting of the Society for Natural Immunity, Montebello, Quebec, Canada, May 2-6, 2015 (INVITED SYMPOSIUM).

2015: International Conference of Cancer Immunotherapy and Macrophages, Tokyo, Japan, July 9-11, 2015 (INVITED SYMPOSIUM).

2015: International Forum on Cancer and Immunology, Lugano, Sept 25-26, 2015 (INVITED PLENARY).

2015: The Inaugural International Cancer Immunotherapy Conference, New York, Sept 16-19, 2015 (INVITED SYMPOSIUM-declined).

2015: Weizmann Australia, 2nd Making Connections Symposium "Future Directions in Cancer Biology and Targeted Therapeutics", 19-20 October 2015, Melbourne (INVITED SYMPOSIUM DECLINED).

2015: 2015 NHRI/IBMS Joint International Conference on Inflammation and Disease, Taiwan, Oct 21-23, (INVITED SYMPOSIUM – declined).

2015: 9th International Conference on Cell Therapy, Seoul, Korea, Oct 23-25, (INVITED PLENARY – declined).

2015: Annual Korean Immunology Meeting, Seoul, Korea, Nov 12-13, 2015 (INVITED SYMPOSIUM – declined).

2015: Immunocan 2nd Euro-Asian Experts Conference on Immune Biomarkers for Personalized Medicine in Oncology, Shanghai, China, Nov 12-13, 2015 (INVITED SYMPOSIUM AND CHAIR – declined).

2015: XGEVA® Immuno-Oncology Global Scientific Advisory Board, Geneva, Switzerland, Nov 19, 2015 (Invited – declined).

2015: ESMO Asia Congress, Singapore, Dec 18-21, 2015 (INVITED SYMPOSIUM - declined).

2016: Keystone Conference, Purinergic Signaling, Vancouver, British Columbia, Canada, Jan 24-29, 2016 (INVITED SYMPOSIUM).

2016: Keystone Conference, Antibodies as Drugs, Whistler, British Columbia, Canada, Mar 6-11, 2016 (INVITED SYMPOSIUM).

2016: BMS Immunooncology Symposium, Redwood City, CA, USA, April 14, 2016 (INVITED KEYNOTE).

2016: Annual AACR Meeting, New Orleans, USA, Apr 16-20, 2016 (INVITED SYMPOSIUM).

2016: Maui Immunotherapy Meeting "T cell immunotherapy: a deeper dive", Maui, Hawaii, USA, June 10-12, 2016 (INVITED SYMPOSIUM).

2016: CRI-CIMT-EATI-AACR Translating Science into Survival, New York, USA, Sep 25-28 (INVITED CHAIR AND SYMPOSIUM).

2016: NK 2016, 16th Meeting of the Society for Natural Immunity, Taormina, Sicily, Italy, October 2-5, 2016 (INVITED SYMPOSIUM).

2016: The 8th Princess Chulabhorn International Science Congress, "Environmental Health: Inter-linkages among the Environment, Chemicals, and Infectious Agents", Bangkok, Thailand, Nov 13-17, 2016 (INVITED CHAIR & PLENARY).

2016: XV Michelangelo Seminar "Immunotherapy comes to age: opportunities, challenges and implication for breast cancer", Milan, Italy, Nov 4 2016 (INVITED SYMPOSIUM - declined).

2017: 9th International Cellular Therapy Meeting, Erlangen, Germany, March 16-17th, 2017 (INVITED SYMPOSIUM).

2017: Keystone Conference, Immune regulation in autoimmunity and cancer, Whistler, British Columbia, Canada, Mar 26-31, 2017 (INVITED SYMPOSIUM).

2017: 5th Annual Meeting of the International Cytokine and Interferon Society 2017, Kanazawa Japan Oct 29-Nov 2, 2017 (INVITED SYMPOSIUM).

Invitations to talk at National Meetings or as a Visiting Seminar Speaker Internationally and Nationally:

1987: Imperial Cancer Research Fund Laboratories, London, England, June 1987. "Immunochemotherapy of solid tumours."

University of Nottingham, Nottingham, England, June 1987. "Immunochemotherapy of

cancer using drug-monoclonal antibody conjugates."

Stanford University Medical School, Palo Alto, CA, USA, September 1987. "The specific targeting of antineoplastic drugs to tumours using monoclonal antibodies."

University of Texas, Health Service Center, Dallas, TX, USA, September 1987. "Immunochemotherapy of cancer using drug-monoclonal antibody conjugates."

University of Minnesota, Minneapolis, MN, USA, September 1987. "The specific targeting of antineoplastic drugs to tumours using monoclonal antibodies."

Bristol Myers Inc., Wallingford, CT, USA, October 1987. "The use of drug-monoclonal antibody conjugates in cancer treatment."

1991: Walter and Eliza Hall Institute of Medical Research, Melbourne, Australia, February 1991. "Role and gene regulation of perforin in cytotoxic cells."

Institute of Medical and Veterinary Science, Adelaide, Australia, February 1991. "Gene regulation of perforin in cytotoxic cells."

1992: NCI-Frederick Cancer Research and Development Center, Frederick, MD, USA, August, 1992. "Cloning of the rat natural killer cell serine protease, RNK-Met-1."

Tenth Scientific Meeting of The Transplantation Society of Australia and New Zealand, Canberra, Australia, Apr. 1992. "T lymphocyte subsets with distinct lytic mechanisms."

1993: Monash University Department of Pathology and Immunology, April, 1993. "NK cell- specific genes-characterisation and uses."

Howard Florey Institute of Experimental Physiology and Medicine, July, 1993. 'The granule exocytosis mechanism of lymphocyte-mediated lysis."

Ludwig Institute for Cancer Research, October, 1993. "Cytotoxic lymphocyte granule proteins and their transcriptional control."

1994: University of Rome "Regina Elena" Cancer Institute, Rome, Italy, May, 1994. "Granzymes-functions and uses."

The Third Annual Conference of the Immunology Group of Victoria, WEHI, Melbourne, Oct. 1994. "NK-specific gene targeting."

Twenty-fourth Annual Scientific Meeting of the Australasian Society for Immunology, Canberra, Dec. 1994. SYMPOSIA: "Cytotoxic lymphocyte granule proteins trigger target cell death."

1995: The Wellcome Symposium, Sydney, April, 1995. "Lymphocyte-mediated cell death - targeted immunotherapy."

The Australian Academy Of Science AGM, Canberra, April, 1995. "Dual mechanisms of lymphocyte-mediated cytotoxicity serve to control and deliver the immune response."

University of Melbourne, Dept. of Microbiology, Melbourne, August, 1995. "The immunotherapeutic potential of killer lymphocytes: maintenance of self."

University of Sydney, Dept. Medical Oncology and Palliative Care, Westmead Hospital, Westmead, 1995. "Immunotherapy : manipulating killer cell function."

Twenty-fifth Annual Scientific Meeting of the Australasian Society for Immunology, Gold Coast, QLD, Dec. 1995. SYMPOSIA: "Dual mechanisms of lymphocyte-mediated cytotoxicity serve to control and deliver the immune response."

1996: NCI-Frederick Cancer Research and Development Center, Frederick, MD, USA, September 1996.
"Perforin and granzymes : a healthy collaboration."

Massachusetts General Hospital, Harvard Medical School, Boston, MA, USA, September 1996.
"Perforin and granzymes : a healthy collaboration."

The Immunobiology of Xenotransplantation, Walter and Eliza Hall Institute, October, 1996. "Cytotoxic mechanisms in xenograft rejection."

St. Vincent's Hospital, Dept. Clinical Immunology, November, 1996. "Perforin and granzymes: a healthy collaboration."

Austin & Repatriation Medical Centre (Repat), Dept. Medicine , December, 1996. "Perforin and FasL: mechanisms of cytolysis and sensitivity to P-glycoprotein."

1997: Ninth Lorne Cancer Conference (in association with AACR), Lorne, Feb, 1997. "The role of perforin in tumor xenograft rejection following adoptive transfer and FasL in allo-CTL bystander lysis."

Annual Immunology of Victoria Conference, Mt. Buffalo, March, 1997. "The role of FasL in allo-CTL bystander lysis."

Peter MacCallum Cancer Institute, May, 1997. " Killer cell-mediated control in vivo."

Twenty-seventh Annual Scientific Meeting of the Australasian Society for Immunology, Perth, WA, Dec 1997. SYMPOSIA: "NK cells, perforin and tumor surveillance."

1998: Sixteenth Scientific Meeting of The Transplantation Society of Australia and New Zealand, Canberra, Australia, Apr. 1998. PLENARY: "NK cells:direct cytotoxicity and promoting CTL differentiation."

Macfarlane Burnet Centre for Medical Research, May, 1998. "Killer cells and viruses: a battle of evolution."

Monash University, Dept. Pathology & Immunology, June 1998. "Immune surveillance and tumour escape mechanisms."

Austin Research Institute Public Information Night, August, 1998. "CANCER - from every perspective."

Institute for Genetics, University of Cologne, October, 1998. "NK cell-specific proteins and effector mechanisms."

Institute for Genetics, University of Cologne, November, 1998. "NK cell-mediated tumor surveillance: models for discovery and defining the players."

Twenty-eighth Annual Scientific Meeting of the Australasian Society for Immunology, Melbourne, Victoria, Dec 1998. SYMPOSIA: "NK cells: emigration and anti-tumor effector function."

1999: Fifth Annual Curtin Conference, "Apoptosis", Canberra, January, 1999. "The drug efflux protein, P-glycoprotein, protects tumor cells from multiple forms of caspase-dependent apoptosis."

Eleventh Lorne Cancer Conference, Lorne, Feb, 1999. "NK cells and tumor metastasis."

Ludwig Tumor Immunology Workshop, Melbourne, March, 1999. "Immunosurveillance of spontaneous and experimental tumours."

DNAX Research Institute of Molecular and Cellular Biology, Palo Alto, March, 1999. "Perforin and TNF superfamily molecules in NK cell tumor surveillance."

University of Texas Southwestern, Dallas, April, 1999. "Perforin and TNF superfamily molecules in NK cell tumor surveillance."

Peter MacCallum Cancer Institute, May, 1999. "Tumor immunesurveillance by cytotoxic lymphocytes."

The Sir Macfarlane Burnet Live-In Workshop for VCE level, University of Melbourne, July, 1999. "Tumor Immunity."

Centenary Institute of Medicine and Cancer Biology, August, 1999. "Tumor immunesurveillance: dissecting the major players."

NCI-Frederick Cancer Research and Development Center, Frederick, MD, USA, October 1999. "Perforin and tumor surveillance."

Joint Children's Cancer Institute Australia and Sydney Children's Hospital Reseach Seminar Program, October, 1999. "Pathways of cell death: regulation by P-glycoprotein."

Third Peter Mac Symposium Initiation and Progression of Cancer, November, 1999."Perforin and tumor surveillance."

Twenty-ninth Annual Scientific Meeting of the Australasian Society for Immunology, Dunedin, NZ, Dec 1999. SYMPOSIA. "Perforin-mediated immune surveillance of cancer."

2000: Institute for Genetics, University of Cologne, May, 2000. "NK cell-mediated tumor immune surveillance."

Eighth Annual Immunology of Victoria Conference, Mt Buffalo, Victoria, Oct 2000. "Cellular networks that control natural and activated anti-tumor immunity."

2000 Hanson Symposium, Cancer: Biology and Therapeutics, Adelaide, Nov 2000. "Cellular networks that control natural and activated anti-tumor immunity."

Thirtieth Annual Scientific Meeting of the Australasian Society for Immunology, Sydney, NSW, Dec 2000. SYMPOSIA: "Cellular networks that control natural and activated anti-tumor immunity."

2001: 7th Annual Australasian Autoimmunity Workshop, Sydney, June 2001. "The anti-tumor activity of alpha-galactosylceramide activated NKT cells."

IgV Techniques Workshop, Melbourne, July 2001. "Tumour models."

Brisbane Immunology Group Seminar Series, Brisbane, July 2001. "The anti-tumor activity of NKT cells."

Monash University, Department of Pathology and Immunology Seminar Series, August 2001. "Effector molecules that control tumour immunosurveillance."

ASI Visiting Speaker to WA, Perth, August 2001. "NKT cells - mediators of tumour and/or CTL suppression?"

The Twelfth Annual Combined Biological Sciences Meeting, Perth, August 2001. PLENARY SPEAKER. "Burnet's tumor immunosurveillance hypothesis revisited."

2002: Fourteenth Lorne Cancer Conference, Lorne, February, 2002. INVITED. “Burnet’s tumor immunosurveillance hypothesis revisited.”

Peter MacCallum Cancer Institute & CSIRO Molecular Science Cancer Research Workshop , Melbourne, April 2002.”Cancer Immunology at Peter Mac.”

University of Turin, Department of Clinical and Biological Sciences, Turin, Italy, May 2002. “Natures path – on the TRAIL to tumor immunotherapy.”

Washington University School of Medicine, St Louis, MO, USA, May 2002. “Tumor immunosurveillance.”

Memorial Sloan Kettering Cancer Institute, New York, NY, USA, May 2002. “Natures path – on the TRAIL to tumor immunotherapy.”

Murdoch Children’s Research Institute, Royal Children’s Hospital, Grand Rounds, Melbourne, July, 2002. "Versatile T cells - new genetic approaches to immunotherapy of cancer."

CSL, Melbourne, August, 2002. “Tumor immune surveillance – effectors and regulators.”

Flinders University, Adelaide, August 2002. “Natures TRAIL - on a path to cancer immunotherapy".

ASI Visiting Speaker University of Adelaide, Adelaide, August 2002. “NKT cells - conductors of anti-tumor immunity”.

Department of Microbiology and Immunology, University of Melbourne, August 2002. “Tumor immunosurveillance – myth to mystery.”

St. Vincent’s Institute for Medical Research, Melbourne, August 2002. “Tumor immunosurveillance – myth to mystery.”

Peter MacCallum Cancer Institute Grand Rounds, Melbourne, September 2002. “Tumor immunosurveillance – myth to mystery.”

Monash University, Department of Biochemistry Seminar Series, Melbourne, November 2002. “Cancer immune surveillance – effectors and regulators.”

Thirty-second Annual Scientific Meeting of the Australasian Society for Immunology, Brisbane, QLD, Dec 2002. SYMPOSIA. “Cancer immune surveillance – effectors and regulators.”

2003: Ludwig Institute for Cancer Research Seminar Series, Melbourne, April, 2003. “Effectors and regulators of tumour immunity.”

NCI, Frederick Cancer Research and Development Center, May, 2003. “TRAIL as an effector and regulator of tumor immunity.”

Seoul National University, Cancer Research Institute, June, 2003. “Effectors and regulators of tumour immune surveillance.”

Ludwig Institute for Cancer Research Seminar Group, Heidelberg, June, 2003. “Effectors and regulators of tumour immune surveillance.”

Baker Medical Research Institute, Melbourne, September, 2003. “Effectors and regulators of tumour immune surveillance.”

John Curtain School of Medical Research, School Seminar, Canberra, September, 2003. "Effectors and regulators of tumour immune surveillance."

WEHI Seminar Series, "A fresh look at tumour immunity.", Melbourne, October, 2003.

Eleventh Annual IgV Meeting, "Anti-TRAIL DR5 targeting promotes tumor immunity." Beechworth, October, 2003.

Fifth Peter MacCallum Cancer Institute Symposium - November (INVITED). "Anti-TRAIL DR5 targeting promotes tumor immunity."

QIMR Seminar Series, Brisbane, November 19th, 2003. "Effectors and regulators of tumour immune surveillance."

Thirty-third Annual Scientific Meeting of the Australasian Society for Immunology, Perth, WA, Dec 2003. PLENARY. "Effectors and regulators of tumour immune surveillance."

2004: Centenary Institute of Medicine and Cancer Biology, May, 2004. "Innate effectors and regulators of tumor immunity."

WEHI Postgraduate Lecture Series, May, 2004. "Tumour immunology".

Department of Pathology and Immunology, Monash University, Melbourne, June, 2004. "Innate effectors and regulators of tumor immunity."

Washington University School of Medicine, St Louis, July 2004.

2005: University of California San Francisco, San Francisco, April, 2005. "Networks and effectors that mediate tumor immune surveillance and immunotherapy".

AMGEN, San Francisco, April, 2005. "Networks and effectors that mediate tumor immune surveillance and immunotherapy".

Queensland Institute of Medical Research, Brisbane, April, 2005. "Networks and effectors that mediate tumor immune surveillance and immunotherapy".

Austin Research Institute, Melbourne, June, 2005. "Networks and effectors that mediate tumor immune surveillance and immunotherapy".

IgV Techniques Workshop, Melbourne, July 2005. "Mouse models of cancer."

Brisbane Immunology Group Meeting (PLENARY), August, 2005. "Networks and effectors that mediate tumor immune surveillance and immunotherapy."

Ludwig Heidelberg Group Meeting, October, 2005.

James Cook University, Townsville, November 28-30th, 2005. "Networks and effectors that mediate tumor immune surveillance and immunotherapy."

Thirty-fifth Annual Scientific Meeting of the Australasian Society for Immunology, Melbourne, Vic, Dec 2005. "Cancer immunosurveillance."

2006: Twenty-fourth Scientific Meeting of The Transplantation Society of Australia and New Zealand, Canberra, April, 2006 (INVITED PLENARY). "Role of lymphocyte effectors in graft rejection."

Garvan Medical Research Institute, July, 2006. “Cancer immunosurveillance.”

IFN Biology Group, Peter MacCallum Cancer Centre, July, 2006.

Australian Health & Medical Research Congress (AH&MRC), Melbourne, November, 2006 (INVITED SYMPOSIUM SPEAKER). “Cancer immunosurveillance.”

Thirty-six Annual Scientific Meeting of the Australasian Society for Immunology, Auckland, NZ, Dec 2006 (INVITED SYMPOSIUM x 3). “Cancer immunosurveillance.”

2007: University of Chieti, Italy, March, 2007 (INVITED SPEAKER). “Cancer immunosurveillance.”

Topics in Cancer Biology Course: Cancer Immunology, Peter MacCallum Cancer Centre, May, 2007.

Clinical Grand Rounds, Peter MacCallum Cancer Centre, May, 2007. “Cancer immunosurveillance: myth to mystery.”

Centenary Institute of Medicine and Cancer Biology, August, 2007. “Cancer immunosurveillance.”

NCI, Frederick Cancer Research and Development Center, October, 2007. “Combination chemo-immunotherapy of established cancer.”

Gordon Ada Oration, Thirty-seventh Annual Scientific Meeting of the Australasian Society for Immunology, Sydney, December, 2007.

2008: Monman Workshop I, Monash University, February 2008 (INVITED SPEAKER-declined)

National University of Singapore, Singapore, April 2008 (INVITED SPEAKER)

WEHI Immunology Seminar Series, Melbourne, May 2008 (SEMINAR)

Hanson Institute Seminar Series, Adelaide May 2008 (SEMINAR)

Immunology Victoria Master Class in Immunology, Melbourne July 2008 (SEMINAR)

Mouse Models of Cancer, Peter Mac, Melbourne, August 2008 (SEMINAR)

Latrobe University, Melbourne August 2008 (SEMINAR)

HMRI Cancer Conference, Newcastle, Sept 2008 (INVITED SPEAKER, declined)

University of Adelaide Seminar Series, Adelaide November 2008 (SEMINAR)

QIMR Seminar Series, Brisbane, Nov 2008 (SEMINAR)

Thirty-eighth Annual Scientific Meeting of the Australasian Society for Immunology, Canberra, December, 2008 (INVITED PLENARY)

2009: Deeley Research Centre, University of Victoria, BC, Canada, January, 2009 (INVITED SEMINAR).

Monman Workshop II, Monash University, February 2009 (INVITED SPEAKER)

Malaghan Seminar Series, Wellington, NZ, March, 2009 (INVITED SEMINAR).

University of Tokyo, Tokyo, March, 2009 (INVITED SEMINAR).

University of Kyoto, Kyoto, March, 2009 (INVITED SEMINAR).

University of Melbourne, Department of Microbiology & Immunology, May, 2009 (INVITED SEMINAR).

Peter MacCallum Cancer Centre, Topics in Cancer – Cancer Immune Surveillance, August, 2009 (INVITED SEMINAR).

ASSG – Developing combination immunotherapeutics in sarcoma, Sydney, August 24th, 2009 (INVITED SEMINAR)

Thirty-ninth Annual Scientific Meeting of the Australasian Society for Immunology, Tumor Immunology Workshop, Gold Coast, December, 2009 (INVITED SPEAKER)

Thirty-ninth Annual Scientific Meeting of the Australasian Society for Immunology, Gold Coast, December, 2009 (INVITED PLENARY)

2010: Centre de Recherche des Cordeliers, Paris, France, April 26, 2010 (INVITED SPEAKER).

Institut Gustave Roussy, Paris, France, April 27, 2010 (INVITED SPEAKER).

3rd Novartis Research and Development Symposium, Melbourne, May 2010 (INVITED SPEAKER - declined).

ASSG – Immunotherapeutics in sarcoma, Melbourne, August 24th, 2010 (INVITED SEMINAR)

Cancer Council Victoria, Sponsors Day, "Combination immunotherapeutics for cancer treatment, June 23rd, 2010 (INVITED SPEAKER).

IHBI, Queensland University of Technology, "Cancer and immunity: a balancing act.", July 15th, 2010 (INVITED SPEAKER).

Mater Medical Research Institute, Brisbane "Cancer and immunity: a balancing act."July 16th, 2010 (INVITED SPEAKER).

Lowy Cancer Research Centre, Sydney, Sept 8th, 2010 (INVITED SEMINAR).

Burnet Seminar Series, Melbourne, Oct 13th, 2010 (INVITED SEMINAR).

Peter Mac Therapeutics Retreat, Oct 25-26th, 2010 (INVITED SPEAKER).

Fourtieth Annual Scientific Meeting of the Australasian Society for Immunology, Perth, December, 2010 (INVITED SPEAKER - WORKSHOP)

2011: Immunology Summer Camp, University of Melbourne, Jan 24-February 5, 2011 (INVITED SPEAKER-declined).

Diamantina Seminar Series, May, June 27th, 2011, Brisbane (INVITED SPEAKER).

WEHI Postgraduate Lecture Series, July 4th, Melbourne (INVITED SPEAKER).

Australasian Prostate Cancer Conference, "Immunotherapy of prostate cancer" Aug 3-4th, Melbourne (INVITED PLENARY).

Bristol Myers Squibb-Peter Mac Immuno-oncology Joint Initiative, Peter MacCallum Cancer Centre, Aug 17th (SPEAKER).

Changing the landscape of melanoma treatment. The power of the immune system. "The role of T cells in driving the anti-tumor immune response", Aug 19-20th (INVITED PLENARY).

Brisbane Immunology Group Seminar Series, QIMR, Sept 5-6th (INVITED SPEAKER).

Australasian Sarcoma Group ASM, Oct 15-16th, 2011, Melbourne (INVITED SYMPOSIUM)

LICR Translational Oncology Conference, Oct 24-26th, 2011, Melbourne (INVITED SPEAKER)

2012: Bristol Myers Squibb, March 21st, 2011, Princeton, USA (INVITED SPEAKER).

Victorian Comprehensive Cancer Centre 1st Breast Cancer Research Collaborative. "Use of mouse mammary cancer models to dissect immune reaction and therapy mechanism of action." July 17, 2012, Melbourne (INVITED SPEAKER).

Jonathan Sprent Oration, BIG Conference, Aug 16-17th, 2012, Kingscliff (INVITED PLENARY)

Scott Kirkbride Melanoma Research Centre Inaugural Melanoma Conference, Oct 24-25th, 2012, Perth (INVITED SPEAKER-declined).

First Australian p53 Workshop, Peter MacCallum Cancer Centre, Nov 19-21st, 2012, Melbourne (INVITED SPEAKER).

Inflammation 2012 Meeting, AMREP, Monash University, Nov 30-Dec 2, 2012, Melbourne (INVITED SPEAKER – declined).

2013: Infection and Immunology Seminar Series, QIMR, Brisbane, May 22, 2013 (INVITED SPEAKER).

ASMR Queensland Postgraduate Student Conference, Brisbane, May 29, 2013 (INVITED SPEAKER).

Brisbane Breast Cancer Workshop, Brisbane, June 20, 2013 (INVITED SPEAKER).

University of Adelaide School of Molecular and Biomedical Sciences Postgraduate Symposium, Adelaide, July 25, 2013 (INVITED SPEAKER - declined).

Griffith University Seminar Series, Gold Coast, August 25, 2013 (INVITED SPEAKER).

Translational Research Institute Seminar Series, Brisbane, Sept 3, 2013 (INVITED SPEAKER).

HIRF-Siemens Research Collaborative Meeting, Brisbane, Nov 21-22, 2013 (INVITED SPEAKER).

2014: Dana Farber Cancer Instutute Seminar Series, Boston, MA, USA April 16th, 2014 (INVITED SPEAKER)

Medimmune, Gaithersburg, MD, USA, April 22nd, 2014 (INVITED SPEAKER)

Centenary Institute, Sydney, May 20th, 2014 (INVITED SPEAKER).

QUT School of Biomedical Sciences Seminar Series, Garden Point, Brisbane June 6th, 2014 (INVITED SPEAKER).

Brisbane Immunology Group (BIG) Conference, Gold Coast, Aug 20-21st, 2014 (PLENARY SPEAKER – HOT TOPICS).

MIA Melanoma Immunotherapy Program, Sydney, Aug 26th, 2014 (INVITED SPEAKER).

Sciences of Oncology, Medical Oncology Group of Australia, Melbourne, Nov 8-9, 2014 (INVITED SPEAKER).

QIMR Berghofer Research Retreat, Twin Waters, Nov 10-11, 2014 (INVITED SPEAKER).

Brisbane Cancer Conference, Brisbane, Dec 18-19, 2014 (INVITED PLENARY).

2015: National Key Laboratory of Medical Immunology, Second Military Medical University, Shanghai, China, Jan 15-16, 2015 (INVITED SPEAKER).

Medimmune LLC, Gaithersburg, MD, USA, May 1, 2015 (INVITED SPEAKER).

Research Excellence in Cancer Care Symposium, Brisbane, July 15, 2015 (INVITED SYMPOSIUM).

Brisbane Melanoma Interest Group Meeting, " Anti-PD1 resistance", Brisbane, Aug 24, 2015 (INVITED SEMINAR).

Australian Sarcoma Group Annual Meeting, Brisbane, October 17-18th, 2015 (INVITED PLENARY)

Medical Oncology Group of Australia, Immunooncology Forum, Melbourne, Oct 24, 25, 2015 (INVITED SYMPOSIUM).

7th Barossa Meeting "Cell Signalling in Cancer Biology & Therapy", Barossa Valley, 18-21 November, 2015 (INVITED SYMPOSIUM).

Immunotherapy@Brisbane 2015, Brisbane, 24-26 November, 2015 (INVITED SYMPOSIUM).

2016: Seminar, Lady Cilento Childrens Hospital, Brisbane, 28th July, 2016 (INVITED SEMINAR)

MOGA Immunooncology Forum, Implementation and Innovation in Immunotherapy, Aug 3, 2016 (INVITED PLENARY).
Frontiers 2016: Garnett Pass Foundation, Gold Coast Sept 8-10th, 2016 (INVITED SYMPOSIUM).

MOGA Sciences of Oncology Education Program, Dec 3-4, 2016 (INVITED PLENARY).

MIPS Seminar, “Targeting adenosine in cancer”, Monash University, Parkville, Dec 5 (INVITED SEMINAR).

Symposia/Plenary Chair:

1994: Twenty-fourth Annual Scientific Meeting of the Australasian Society for Immunology, Canberra, December, 1994, " Mechanisms of Cytotoxicity."

1997: Annual Immunology of Victoria Conference, Mt. Buffalo, March, 1997.

1997: Twenty-seventh Annual Scientific Meeting of the Australasian Society for Immunology, Perth, WA, Dec 1997, "Tumour Immunology and Cytotoxic Cells."

1998: Twenty-eighth Annual Scientific Meeting of the Australasian Society for Immunology, Melbourne, Victoria, Dec 1998. "NK cells and Innate Immunity."

1998: Twenty-eighth Annual Scientific Meeting of the Australasian Society for Immunology, Melbourne, Victoria, Dec 1998. "Tumour Immunology."

1998: Twenty-eighth Annual Scientific Meeting of the Australasian Society for Immunology, Melbourne, Victoria, Dec 1998. "Clinical Trials of Vaccines."

2000: Eight Immunology of Victoria Annual Meeting, Mt Buffalo, Victoria, Oct 2000 “Infection and Immunity”.

2000: Thirtieth Annual Scientific Meeting of the Australasian Society for Immunology, Sydney, Dec 2000. "Migration and inflammation in health and disease."

2001: Ninth Immunology of Victoria Annual Meeting, Mt Buffalo, Victoria, Oct 2001.

2002: The 19th International Natural Killer Cell Workshop, San Juan Puerto Rico, October, 2002.

2003: Sapporo International Cancer Symposium, Sapporo, Japan, July, 2003.

2003: ComBio 2003, Melbourne, October, 2003. “Tumor Immunology.”

2003: The International Society for Interferon and Cytokine Research, Cairns, October, 2003. “Interferons in tumor immunology.”

2003: Thirty-third Annual Scientific Meeting of the Australasian Society for Immunology, Perth, WA, Dec 2003. “Apoptosis and the immune system.”

2004: International Congress in Immunology, Montreal, Canada, July, 2004.

2004: 3rd International Workshop on NKT cells and CD1 mediated antigen presentation, Heron Is, Australia, September, 2004.

2004: Thirty-fourth Annual Scientific Meeting of the Australasian Society for Immunology, Adelaide, SA, Dec 2004. Symposium “NK cells”(invited/declined).

2005: Thirty-fifth Annual Scientific Meeting of the Australasian Society for Immunology, Melbourne, Vic, Dec 2005. Symposium “Innate Immunity”.

2006: 6th International Cytokine Meeting, Vienna, Austria, August, 2006 (INVITED CHAIR and SYMPOSIUM SPEAKER Microenvironment/Apoptosis).

2006: Thirty-six Annual Scientific Meeting of the Australasian Society for Immunology, Auckland, NZ, Dec 2006 (INVITED CHAIR).”Tumor immunology.”

2007: Thirty-seventh Annual Scientific Meeting of the Australasian Society for Immunology, Sydney, NSW, Dec 2007 (INVITED CHAIR – TUMOUR IMMUNOLOGY WORKSHOP).

2008: Thirty-eighth Annual Scientific Meeting of the Australasian Society for Immunology, Canberra, ACT, Dec 2008 (INVITED CHAIR).

2009: Thirty-ninth Annual Scientific Meeting of the Australasian Society for Immunology, Gold Coast, December, 2009 (INVITED CHAIR - PLENARY)

2010: The AACR Annual Meeting, Washington DC, USA, April 17-21 (INVITED SYMPOSIUM CHAIR – Tumor immune suppression and escape).
Fourtieth Annual Scientific Meeting of the Australasian Society for Immunology, Perth, December, 2010 (INVITED CHAIR - WORKSHOP)

Fourtieth Annual Scientific Meeting of the Australasian Society for Immunology, Perth, December, 2010 (INVITED CHAIR – TUMOR IMMUNOLOGY WORKSHOP)

2011: Keystone Symposium "Antibodies as Drugs" Keystone, CO, USA, Feb 6-11th(INVITED CHAIR-PLENARY).

2011: Keystone Symposium "Cancer Control by Tumor Suppressors and Immune Effectors" Santa Fe, NM, USA, Feb 12-17th 2011 (INVITED CHAIR - Workshop).

2012: Fourty second Annual Scientific Meeting of the Australasian Society for Immunology, Melbourne, December 2012 (INVITED CHAIR – TUMOR IMMUNOLOGY WORKSHOP)

Other presentations:

1992: Fourteenth International Congress of the Transplantation Society, Paris, France, August, 1992. "T lymphocyte subsets with distinct lytic mechanisms."

1993: The Fifth Lorne Cancer Conference, Lorne, Australia, February, 1993. "Purification and cloning of a novel granzyme activity from natural killer cells."

1994: The Nineteenth Annual Lorne Conference on Protein Structure and Function, Lorne, Australia, February, 1994. "Granule serine proteases are normal nuclear constituents of natural killer cells."

Rotary Club of Heidelberg, October, 1994. "Lymphocyte-immunotherapy of cancer."

1995: The Ninth International Congress of Immunology, San Francisco, CA, USA, July, 1995. "Cytotoxic lymphocyte granule proteins trigger target cell death."

1996: The Twenty First Annual Lorne Conference on Protein Structure and Function, Lorne, Australia, February, 1996. "A novel substrate binding pocket interaction restricts the specificity of the human natural killer cell-specific serine protease, Met-ase-1."

1998: Tenth Lorne Cancer Conference, Lorne, Feb. 1998. "P-glycoprotein additionally protects drug-resistant tumor cells from multiple forms of caspase-dependent apoptosis."

2000: Twelfth Lorne Cancer Conference, Lorne, Feb. 2000.

2001: Thirteenth Lorne Cancer Conference, Lorne, Feb. 2001.

2003: Fifteenth Lorne Cancer Conference, Lorne, Feb. 2003.

2005: AAI Meeting/FASEB, San Diego, April, 2005.

2011: 19th Annual International Symposium. Immune Effector Mechanisms in Tumor Immunity. Cancer Research Institute, New York City, New York, USA. Oct 3-5, 2011.

Teaching Experience:

Lecturing:

I used to spend 4-6 hours a year in undergraduate teaching (Monash and Uni. Melbourne- Dept. Pathology and nationally). At QIMR I am committed to working with Universities to provide an opportunity to nurture new talent to join the effort to understand and treat cancer. Students, including foreign trainees are engaged in quality experimental science in my laboratory. I strive to attract the best students from tertiary and post-graduate areas and inspire them to pursue further studies in treatment and research in cancer-related fields.

Postgraduate and undergraduate teaching involvement:

Positions held

1984	Demonstrator in Histology, University of Melbourne
1986	Demonstrator in Microbiology, University of Melbourne
1990	Supervisor, Frederick County Student Intern Program, NCI-Frederick Cancer Research and Development Center, Frederick, MD, USA
1993-2000	Senior Associate in the Department of Surgery, Austin and Heidelberg Repatriation Hospitals, University of Melbourne.
1993-	Senior Associate in the Department of Surgery, Austin and Heidelberg Repatriation Hospitals, University of Melbourne
1994-1998	Senior Associate in the Department of Pathology, University of Melbourne.
1998-2000	Associate Professor, Victoria University of Technology
1998-2000	Senior Fellow in the Department of Medicine, Austin and Heidelberg Repatriation Medical Centre.
1999-2006	Associate Professor, Department of Pathology, University of Melbourne
1999-2006	Honorary Associate Professor in the Department of Microbiology and Immunology, University of Melbourne.
1999-2006	Honorary Associate Professor in the Department of Pathology and Immunology, Monash University.
2006-	Honorary Professor in the Department of Pathology and Immunology, Monash University.
2007-	Honorary Professor, Department of Pathology, University of Melbourne
2007-	Honorary Professor in the Department of Microbiology and Immunology, University of Melbourne.
2013-	Honorary Professot in the School of Medicine, University of Queensland.

Undergraduate:
In departments with whom I have held positions (as above), I have provided ad-hoc lecturing to third year B.Sc. and Medical undergraduates. In general, I have provided a total of between one to three lectures per year on topic such as NK cells, tumor immunology and cellular cytotoxicity.

Postgraduate:
I have (or are currently) supervised and trained the following students:
*joint supervision with Joe Trapani, ** with Ricky Johnstone, *** with Dale Godfrey, **** with Kresten Skak, # with Phillip Darcy, ## with Nicole Haynes, ### with Trina Stewart, % with Daniel Andrews, $ with Shaun McColl, $$ with Andreas Moeller, & with Steven Lane

Other students

Mr Jason Chen	Winter Research Program [School of Biomedical Sciences, University of Queensland] (Jun-Aug 2015) (Aug-Nov 2015, SCIE3220).
Ms. Yelena Krasnova	Winter Research Program [University of Queensland] (Jun-Aug 2015).
Ms. Tricia Treo	Winter Research Program [University of Queensland] (Jun-Aug 2016).

B. Sc. (Project):

Ms. Laura McDade	Immunology [University of Queensland] (July 2013-Nov 2013)

B. Sc. (Hons.):

*Ms. Pangayachelvi Ganesvaran	B. Sc. (Hons.) [University of Melbourne] (1994) - H2A.
Mr. Michael O'Connor	B. Sc. (Hons.) [University of Melbourne] (1995) – H1.
Ms. Nicole Haynes	B. Sc. (Hons.) [University of Melbourne] (1997) – H1 (1st).
**Ms. Jenny Lo	B. Sc. (Hons.) [University of Melbourne] (1997) – H1.
Ms. Hong Chi-Ly	B. Sc. (Hons.) [University of Melbourne] (1999) - H1.
***Mr. Kon Kyparissoudis	B. Sc. (Hons.) [Monash University] (2001) – H1 (1st).
#Ms. Michele Teng	B. Sc. (Hons.) [University of Melbourne] (2001) – H1.
#Ms. Maria Moeller	B. Sc. (Hons.) [University of Melbourne] (2001) – H1 (1st).
%Mr. Christpher Chan	B. Sc. (Hons.) [Monash University] (2008) – H1 (1st)
%Mr. Melvyn Chow	B. Sc. (Hons.) [University of Melbourne] (2009) – H1 (1st).
###Ms. Fransisca Go	B. Sc. (Hons.) [University of Melbourne] (2009) – H1 (1st).
##Ms Jenna Langfield	B. Sc. (Hons.) [University of Melbourne] (2009) – H1 (1st).

M.Sc.:

Ms. Kimberley Ottaway	M.Sc. [Hood College, Frederick, MD] (completed 1991).
*Mr. Michael Kershaw	M.Sc. (Prelim) [University of Melbourne] (1993) – H1.
Ms. Erika Cretney	M.Sc. (part-time) [University of Melbourne] (2000-June2002).
Mr Kevin Kos	M.Sc. [Vrije Universiteit Amsterdam] (2016).

Ph.D.:

Mr. Michael Kershaw	Ph. D. [University of Melbourne] (1994-1997 completed).
*Mr. Kevin Thia	Ph.D. [University of Melbourne] (1995- converted to MSc.).
#Ms. Nicole Haynes	Ph.D. [University of Melbourne] (1998-2002 completed).
**Ms. Astrid Ruefli	Ph.D. [University of Melbourne] (1998-2002 completed).
***Ms. Nadine Crowe	Ph.D. (Monash University) (2000- 2003 completed).
Ms. Erika Cretney	Ph.D. [University of Melbourne] (July 2002-2004 completed).
***Ms. Jessica Markby	Ph.D. (Monash University) (2000-2006 completed).
***Ms. Shayna Street	Ph.D. (Monash University) (2001- 2005 completed).
#Ms. Michele Teng	Ph.D. [University of Melbourne] (2002-2006 completed).
#Ms. Maria Moeller	Ph.D. [University of Melbourne] (2003-2007 completed).
Mr. Jeremy Swann	Ph.D. [University of Melbourne] (February 2003-2007 completed).
**Ms. Aisla Frew	Ph.D. [University of Melbourne] (February 2005-2008 completed)
***Mr. Paul Bolitho	Ph.D. [University of Melbourne] (February 2005-)
*Ms. Desiree Anthony	Ph.D. [University of Melbourne] (February 2005-2009 completed)
****Mr. Henrik Sondergaard	Ph.D. [University of Copenhagen] (Oct 2006-2010 completed).
$Ms. Yuka Harata-Lee	Ph.D. [University of Adelaide] (March 2008-2012 completed)
%Mr Christopher Chan	Ph.D. [Monash University] (June 2009-2013 completed)
**Ms Alison West	Ph.D. [University of Melbourne] (February 2009-2013 completed)
Mr. Shin Foong Ngiow (Malaysia)	Ph.D. [University of Melbourne] (June 2009-2013 completed).
%$$Mr Melvyn Chow	Ph.D. [University of Melbourne] (March 2010-April 2013 completed)
$$Ms Jacelyn Sceneay	Ph.D. [University of Melbourne] (May 2010-Dec 2013 completed)

Mr. Lucas Ferrari de Andrade	Ph.D. [Universidade Federal do Parana](Mar 2011-Aug 2014 completed)
$$Ms Jing Liu	Ph.D. [University of Queensland] (Feb 2013-June 2016 completed)
$Ms. Carly Gregor	Ph.D. [University of Adelaide] (March 2013-)
Ms. Arabella Young	Ph.D. [University of Queensland] (July 2013-)
Ms. Rebecca Austin	Ph.D. [University of Queensland] (Feb 2014-)
Ms. Heidi Harjunpaa	Ph.D. [University of Queensland] (July 2014)
Ms. Elizabeth Ahern	Ph.D. [University of Queensland] (Apr 2015)
Mr. Yuling Gao	Ph.D. [University of Queensland] (Apr 2015)
Mr Juming Yan	Ph.D. [University of Queensland] (Apr 2015)
Mr Dillon Corvino	Ph.D. [University of Queensland] (Apr 2015)
Mr Jake O'Donnell	Ph.D. [University of Queensland] (Jan 2016)

Other:

Ms. Angela Gordon	ACCV Kathleen Cunningham Foundation Studentship (95-96)
Ms. Jenny Dwyer	ACCV Studentship (2000-2001).

Awards to Students:

Dr. Michael Kershaw	awarded NH&MRC C.J. Martin Fellowship (1998).
*Mr. Kevin Thia	awarded a NH&MRC Dora Lush Scholarship (1995).
***Ms. Shayna Street	awarded a NH&MRC Dora Lush Scholarship (2001).
#Ms. Nicole Haynes	awarded Amgen Prize (Deans Hons.) (1997).
#Ms. Michele Teng	awarded MIRS and MIFRS for International students (2001).
***Mr. Kon Kyparissoudis	B.Sc. (Hons) Nairn Medal for Departmental Top of Year
#Ms. Nicole Haynes	Peter MacCallum Cancer Institute Post-Graduate Student Medal, 2002
#Ms. Nicole Haynes	Cancer Council of Victoria Post-doctoral Fellow, University of Melbourne (2003-).
**Dr. Astrid Ruefli	Premiers Award for Medical Research, 2002, Winner
Ms. Erika Cretney	1st Poster Prize, 9th International Congress on TNF related cytokines, San Diego, 2002.
Ms. Michele Teng	1st Poster Prize, Australasian Society for Immunology, Perth, 2003.
Ms. Erika Cretney	Peter MacCallum Cancer Centre Post-Graduate Student Medal, 2004.
Ms. Erika Cretney	Cure Cancer Foundation Ph.D. Student Finalist, 2004.
Ms. Nadine Crowe	Premiers Award for Medical Research, 2004, Commendation.
Ms. Erika Cretney	Premiers Award for Medical Research, 2004, Commendation.
Ms. Shayna Street	St. Jude Children's Research Hospital Special Post-doctoral Fellowship, 2005.
Mr. Jeremy Swann	1st Poster Prize, Australasian Society for Immunology Tumour Immunology, Adelaide, 2005.
Ms. Aisla Frew	Cancer Research Institute Pre-doctoral Scholarship (2005).
Mr. Paul Bolitho	Cancer Research Institute Pre-doctoral Scholarship (2005).
Dr. Erika Cretney	Premiers Award for Medical Research 2005, Commendation.
Dr. Erika Cretney	Victoria Fellowship (2005).
Ms. Michele Teng	Jean Gilmore Bursary, Australian Federation of University Women (2005).
Mr. Jeremy Swann	Ferid Murad Poster Award, ISICR Meeting, Shanghai, China (2005).
Mr. Jeremy Swann	Peter MacCallum Cancer Centre Post-Graduate Student Medal, 2007.
Ms. Maria Moeller	Peter MacCallum Cancer Centre Post-Graduate Student Medal, 2007.
Mr Christopher Chan	Peter MacCallum Cancer Centre Lundie Award, 2008.
Mr. Christopher Chan	Top rank student for Faculty of Medicine, Nursing and Health Sciences, Monash University.
Mr Christopher Chan	Leukemia Foundation Scholarship, 2009-2011.
Mr Christopher Chan	Cancer Research Institute Pre-doctoral Scholarship (2009, declined).
Mr Christopher Chan	2008 Lundie Prize (Best Honours Graduate, Peter Mac).
Ms Alison West	NH&MRC Biomedical Postgraduate Scholarship 2009.

Mr Melvyn Chow	Cancer Research Institute Pre-doctoral Scholarship (2010).
Mr Melvyn Chow	Beaney Scholarship in Pathology (2010).
Mr Melvyn Chow	awarded fee paying scholarship for International students (2011).
Mr Shin Foong Ngiow	Travel Bursary, 14th ICI Congress, Kobe (2010).
Mr Shin Foong Ngiow	Awarded fee paying scholarship for International students (2011).
Ms. Alison West	Cancer Therapeutics CRC Travel Scholarship (2011).
Ms Alison West	Cancer Therapeutics CRC Best Oral Presentation (2011).
Mr Christpher Chan	Travel Award and Oral Presentation NK2012 meeting of Society of Natural Immunity (2012)
Ms. Alison West	Cancer Council of Victoria Post-doctoral Fellow, University of Melbourne (2012-).
Mr Shin Foong Ngiow	ASI Travel Bursary, 15th ICI Congress, Milan (2013).
Ms. Jaclyn Sceneay	Peter MacCallum Cancer Centre Post-Graduate Student Medal, 2013.
Ms. Jing Liu	Awarded fee paying scholarship for International students (2012).
Ms. Arabella Young	CCQ Postgraduate Scholarship (2014-2016). EMBL Australia Travel Award (2013).
Mr. Lucas Andrade	Travelling Fellowship from the Conselho Nacional de Pesquisa e Desenvolvimento Tecnológico
Mr. Christopher Chan	Peter MacCallum Cancer Centre Post-Graduate Student Medal, 2014.
Ms. Rebecca Austin	Leukemia Foundation Postgraduate Scholarship (2015-2017).
Ms. Yuka Harata-Lee	Immunology and Cell Biology Publication of the Year (2014).
Ms. Arabella Young	ASMR Queensland Best Postgraduate Presentation (2016).

Postdoc trained:
Phillip Darcy (1995-2000), Ricky Johnstone (1996-1999), Michael Kershaw (2002-2005), Erika Cretney (2005-2006), Morgan Wallace (2003-2005), Serani van Dommelen (2004-2007), Jeremy Swann (2007), Yoshihiro Hayakawa (2002-2006), Adam Uldrich (2006-2010), Ailsa Frew (2009-2010), John Stagg (2006-2010), Christel Devaud (2010-2011), Paul Beavis (2011-2013), Trina Stewart (2008-2011), Nicole Haynes (2007-2013), Stephen Mattarollo (2010-2012), Daniel Andrews (2007-2013), Nikola Baschuk (2010-2013), Michele Teng (2006-2013), Christophe Paget (2010-2013), Ludovic Martinet (2012-2014), Melvyn Chow (2013-2014), Fernando Guimaraes (2013-), Shin Foong Ngiow (2013-).

Postdoc current:
Liam Town (2012-), Deepak Mittal (2013-), Kimberley Stannard (2013-), Camille Guillerey (2014-), Stephen Blake (2014-), Xian-Yang Li (2015-), Deborah Barkauskas (2015-), Eva Putz (2015-), Kyohei Nakamura (2015-), Dipti Vijayan (2016-), Stephen Blake (2016-), Tobias Bald (2016-).

Sabbatical: Kresten Skak (2007-2008), Kazuyoshi Takeda (2005-2007)
Senior Principal Research Fellow: William Dougall (2016-)
Postdoc Awards/Grants:

Dr. Daniel Andrews	NH&MRC Doherty Fellowship (2007-2011) NH&MRC New Investigator Project Grant (2009-2011): "Understanding NK cell homeostasis." (566602) CA Project Grant (628304) (2010) NH&MRC CDA1 (1028245) (2012-2015). NH&MRC Project Grant (2013).
Dr. Morgan Wallace	NH&MRC Doherty Fellowship (2003-2006)

Dr. John Stagg	DoD concept award: Characterization of the immune modulatory effect of regulatory T cells on NK cells during breast cancer for the development of novel therapeutic strategies. (2005-2006) Appointed Assistant Professor, Faculty of Pharmacy (Tenure Track), Montreal Cancer Centre, University of Montreal, Canada. NH&MRC Project Grant (2011-2013). Role of CD73 in cancer: validating a novel therapeutic target.
Dr. Michele Teng	Cancer Council of Victoria Post Doctoral Fellowship: Genetic modification of NKT cells for cancer therapy. (2005-2006). ASI Post-doctoral Travelling Award, 2007. NH&MRC Doherty Fellowship (2007-2011). PCFA Research Project Grant (2011-2013). NH&MRC CDA1 (1025552)(2012-2015). Team Head, QIMR.
Dr. Erika Cretney	Cancer Council of Victoria Post-doctoral Fellow, University of Melbourne (2005-2006) NH&MRC Doherty Fellowship (2009-2013)
Dr. Yoshihiro Hayakawa	Cancer Research Institute Post-doctoral Fellowship (2002-2004) NH&MRC RD Wright Fellowship (2006-2009) NH&MRC Project Grant (400096)(2006-2008)
Dr. Nicole Haynes	Post-doctoral Fellow with Jason Cyster, UCSF, CA, USA (2004-2006). NH&MRC CJ Martin Fellowship, Peter MacCallum Cancer CentreCure Cancer Australia and Cancer Australia Project Grant (2010): "Characterization of the immunoregulatory capacity of antibody-based immunotherapeutics in established cancer."
Dr. Nadine Crowe	Cancer Council of Victoria Post-doctoral Fellow, University of Melbourne (2003-2004)
Dr. Michael Kershaw	NH&MRC R. D. Wright Fellow, Cancer Immunology Program, Peter Mac. NH&MRC Project Grant (2007-2009) NH&MRC Project Grant Generating Tumour - specific Dendritic cells for cancer therapy (2007-2009) NH&MRC CDA2 NH&MRC Senior Research Fellowship (2009-2013) NH&MRC Program Grant (2012-2016)
Dr. Astrid Ruefli	Post-doctoral Fellow, Genentech Corp., CA, USA Senior Scientist, AMGEN Corp, San Francisco, CA, USA
Dr. Ailsa Frew	Cancer Council of Victoria Post-doctoral Fellow, University of Melbourne (2009-2010). ETH Post-doctoral Fellowship, Institute of Pharmaceutical Sciences, Zurich, Switzerland (2011-2012). C.J. Martin Fellowship (2011-2014)

Dr. Trina Stewart	Cancer Council of Victoria Project Grant (2010-2012). "Use of anti-CCL2 mAb therapy as an adjuvant to reduce tumour growth and tumour-induced immunosuppression."
Dr. Trina Stewart	National Breast Cancer Foundation Early Career Fellowship (2010-2013).
Dr. Christel Devaud	Fondation Recherche Medicale Post Doctoral Fellowship (2010).
Dr. Christophe Paget	DOD Breast Cancer Program Post-doctoral Fellowship (2011-2014). INSERM Charge de Recherche Rank 1.
Dr. Stephen Mattarollo	Victorian Cancer Agency Early Career Seed Grant (2011) NH&MRC Project Grant (2013-2015 - $434,640). CCQ Project Grant (2014-2015 - $200,000) Research Fellow/Group Leader, Translational Research Institute. NH&MRC CDF1 (2013-2017)
Dr. Ludovic Martinet	QIMR Collaborative Seed Funding Grant (2013, $35,000)
Dr. Paul Beavis	NBCF Post Doctoral Fellowship (2014-2017).
Dr. Deepak Mittal	2013 Weekend to End Women's Cancers Grant (2013, $50,285)
Dr. Fernando Guimaraes	2014 NH&MRC Early Career Fellowship (2015-2018)
Dr. Shin Foong Ngiow	NH&MRC C.J. Martin Fellowship (2016-2019) QIMR Berghofer
Dr. Camille Guillerey	2015 NH&MRC Early Career Fellowship (2016-2019) QIMR Collaborative Seed Funding Grant (2016, $20,000)
Dr. Kyohei Nakamura	QIMR Collaborative Seed Funding Grant (2016, $20,000)

Founding faculty member of the Cancer Research Institute Pre-doctoral Emphasis Program in Tumour Immunology:

The Cancer Research Institute (CRI, http://www.cancerresearch.org) was founded in 1953 to foster the science of cancer immunology and in 1998 established the Pre-doctoral Emphasis Pathway in Tumour Immunology with the aim of attracting science and medicine students into the field of cancer immunology. I founded a Faculty comprising three institutions in Melbourne: the Peter MacCallum Cancer Centre; the University of Melbourne Department of Microbiology and Immunology; and the Ludwig Institute for Cancer Research, and was in 2004 awarded a Program grant ($US450,000) to train new students for PhD and MD degrees in Tumour Immunology at The University of Melbourne. The Faculty in conjunction with the University of Melbourne has made 5 highly prestigious and competitive awards for students commencing in 2004 through 2007. These scholarships are providing valuable financial support for promising researchers, excellent research training in Tumour Immunology and many additional professional development opportunities. The Program has expanded across several Institutes in Melbourne (now including WEHI) and was re-awarded in 2006 and 2010 for third 4-year term.

Jon Coquet
Paul Bolitho
Jessica Bolden
Lauren Pitt
Olivia Susanto
Ailsa Frew
Nicole Messina
Erika Duan
Nieroshan Rajarubendra

Qian Li
Garth Cameron
Mohammed Hassin
Melvyn Chow
Shin Foong Ngiow

Peter MacCallum Cancer Centre Administration:

Past Member of Animal Ethics Experimentation Committee (2000-2002)
Member of the Animal Facility Core Review Committee (2000-)
Member of Student Advisory Committee (2000-)
Member of the Education Committee (2005-)
Developing research staff classification and research strategy documents.

I was the co-Head of the Cancer Immunology Program at the Peter Mac (~75 combined staff and higher degree students). I spent 2-3 days a year formally reviewing our Program at a retreat. This was a comprehensive meeting covering all aspects of our research at Peter Mac, including our budget, staff issues, mentoring students, relationships with collaborators, funding opportunities, commercialization and clinical opportunities, and resource allocation. I also attended a weekly 1hr Program meeting as well as my own 1hr laboratory meeting. We employed a full-time Laboratory manager, to assist in day-to-day ordering, inventory, safety, and budget quality control.

I was one of seven members of a Research Management Team (RMT) running the Research Division at Peter Mac. We met every two weeks for an afternoon to discuss a wide range of Research Division issues including budget, recruitment, policy, infrastructure, granting opportunities, annual performance reviews and a host of other matters. Generally as a member of this executive I had a couple of major tasks over the year. I was instrumental in preparing the "Process of Review, Incrementation and Promotion" document for all research staff at the Peter Mac. I also played a role in the refurbishment and space allocation of the animal facilities (Stategic Animal Space Committee), and have played a role in the appointment of new Investigators (Recruitment). On occasion, as a member of this executive, I was also asked to contribute to Peter Mac Hospital strategic policy. I was a member of the Education committee overseeing the Education Officer.

I also participated in several Peter Mac committees (postgraduate student committee, animal facility core review committee, and Peter Mac animal ethics experimentation committee). My role on student committee was to ensure students are making progress and are provided the appropriate intellectual environment and resources. As one of three senior staff supervising the core activity of the animal house and its manager, I was responsible for the efficient and ethical running of two major animal facilities. The student review committees met twice a year for a total of 4 days and the ethics and animal users group meetings occur about 10 times a year for half a day each. I was a member of the organising committee of the 5th Peter Mac Symposium (2003), Chairman of the organizing committee of the 2010 Peter Mac Therapeutics Retreat.

Queensland Institute of Medical Research Administration:

Senior Scientist, Management Advisory Group (DCC)(2013-)
Immunology Coordinator (2015)
Animal Ethics and Experimentation Committee Category B Member (2013, 2014)
QIMR Berghofer Medical Research Institute Retreat Committee (2013)

Other Interests:

Golf
- Member, Kingston Heath Golf Club 1981-2007
- Victorian Junior Team 1980-83,
- Victorian Sand Greens Champion 1985
- Nepean Open Champion 1984

- University of Melbourne Full Blue 1985,86,88
- All Australian University Team 1985,86,88
- Australian University Champion 1986,88

Professional Tournaments - Victorian Open 1981, 1984; Australian Open 1983

Cricket, AFL
Gym
Member MCC

BIBLIOGRAPHY:

PEER REVIEW ARTICLES: [citations]

1. **Smyth, M. J.**, Pietersz, G. A., Classon, B. J., and McKenzie, I. F. C.: The specific targeting of chlorambucil to tumors with the use of monoclonal antibodies. J. Natl. Cancer Inst. 76:503-510, 1986 **[59].**

2. **Smyth, M. J.**, Pietersz, G. A., and McKenzie, I. F. C.: Potentiation of the in vitro cytotoxicity of chlorambucil by monoclonal antibodies. J. Immunol. 137:3361-3366, 1986 **[6].**

3. **Smyth, M. J.**, Pietersz, G. A., and McKenzie, I. F. C.: Selective enhancement of antitumor activity of N-acetyl Melphalan upon conjugation to monoclonal antibodies. Cancer Res. 47:62-69, 1987 **[50].**

4. **Smyth, M. J.**, Pietersz, G. A., and McKenzie, I. F. C.: The in vitro and in vivo antitumor activity of N-AcMEL-F(ab')$_2$ conjugates. Br. J. Cancer 55:7-11, 1987 **[15].**

5. **Smyth, M. J.**, Pietersz, G. A. and McKenzie, I. F. C.: The use of vasoactive agents to increase tumor perfusion and the anti-tumor efficacy of drug-monoclonal antibody conjugates. J. Natl. Cancer Inst. 79:1367-1373, 1987 **[52].**

6. Pietersz, G. A., **Smyth, M. J.**, and McKenzie, I. F. C.: Immunochemotherapy of a murine thymoma with the use of idarubicin-monoclonal antibody conjugates. Cancer Res. 48:926-931, 1988 **[45].**

7. **Smyth, M. J.**, Pietersz, G. A., and McKenzie, I. F. C.: The increased antitumor effect of immunoconjugates and tumor necrosis factor in vivo. Cancer Res. 48:3607-3612, 1988 **[47].**

8. **Smyth, M. J.**, Pietersz, G. A., and McKenzie, I. F. C.: Immunosuppression of graft rejection with idarubicin-monoclonal antibody conjugates by elimination of T cell subsets in vivo. Transplantation 46:126-131, 1988 **[7].**

9. McKenzie, I. F. C., **Smyth, M. J.**, Mottram, P., Bogdanovski, M., and Pietersz, G. A.: Monoclonal antibody - drug/toxin immunoconjugates in transplantation. Transplantation Proc. 21:823-825, 1989 **[n/a].**

10. Mottram, P. L., **Smyth, M. J.**, Pietersz, G. A., Clunie, G. J. A., and McKenzie, I. F. C.: Anti-T-cell monoclonal antibodies for in vivo treatment of cardiac allograft rejection in mice. Transplantation Proc. 21:1020-1021, 1989 **[n/a].**

11. **Smyth, M. J.**, Pietersz, G. A., and McKenzie, I. F. C.: The effect of Idarubicin-monoclonal antibody treatment on first-set rejection of murine skin allografts. Transplantation, 48:77-79, 1989 **[5].**

12. Mottram, P. L., **Smyth, M. J.**, Pietersz, G. A., Clunie, G. J. A., and McKenzie, I. F. C.: Anti-T-cell-specific immunoconjugates in mice: In vivo effects. Transplantation Proc. 21:3757-3759, 1989 **[n/a].**

13. Tjandra, J. J., Pietersz, G. A., **Smyth, M. J.**, Teh, J. G., Cuthbertson, A. M., Sullivan, J. R., and McKenzie, I. F. C.: Phase I clinical trial of drug-monoclonal antibody conjugates in patients with advanced colorectal carcinoma - a preliminary report. Surgery 106:533-545, 1989 **[33].**

14. **Smyth, M. J.**, Ortaldo, J. R., Okumura, K., and Young, H. A.: IL-2 induction of perforin mRNA expression in human lymphocyte subsets. Cytokine 1:153, 1989 **[n/a].**

15. Pietersz, G. A., Krauer, K., Toohey, B., **Smyth, M. J.**, and McKenzie, I. F. C.: Biodistribution of N-acetylmelphalan-monoclonal antibody conjugates in mice. Antibody: Immunoconjugates and Radiopharmaceuticals 3:27-35, 1990 **[n/a].**

16. **Smyth, M. J.**, Ortaldo, J. R., Shinkai, Y. -I., Yagita, H., Nakata, M.,, K., and Young, H. A.: Interleukin-2 induction of pore-forming protein gene expression in human peripheral blood $CD8^+$ T cells. J. Exp. Med. 171:1269-1281, 1990 **[115].**

17. **Smyth, M. J.**, Ortaldo, J. R., Bere, W., Yagita, H., Okumura, K., and Young, H. A.: IL-2 and IL-6 synergize to augment the pore-forming protein gene expression and cytotoxic potential of human peripheral blood T cells. J. Immunol. 145:1159-1166, 1990 **[74].**

18. Galli, M-C., **Smyth, M. J.**, Young, H. A., Reynolds, C. W., and Ortaldo, J. R.: Differential regulation of IL-1 gene expression in human $CD3^-$ LGL. Cell. Immunol. 131:184-190, 1990 **[5].**

19. Nakata, M., **Smyth, M. J.**, Norihisa, Y., Kawasaki, A., Shinkai, Y., Okumura, K., and Yagita, H.: Constitutive expression of pore-forming protein in peripheral blood gamma delta T cells: Implication for their cytotoxic role in vivo. J. Exp. Med. 172:1877-1880, 1990 **[109].**

20. **Smyth, M. J.**, Bogdanovski, M., McKenzie, I. F. C., and Pietersz, G. A.: The antitumor activity of idarubicin-monoclonal antibody conjugates in a disseminated thymoma model. Cancer Res. 51:310-317, 1991 **[9].**

21. Mason, A., Bernard, A., **Smyth, M. J.**, and Ortaldo, J. R.: Role of CD2 in regulation of $CD3^-$ LGL function. Eur. Cytokine Net. 2:31-37, 1991 **[5].**

22. **Smyth, M. J.**, and Ortaldo, J. R.: Comparison of the effect of IL-2 and IL-6 on the lytic activity of purified human peripheral blood large granular lymphocytes. J. Immunol. 146:1380-1384, 1991 **[48].**

23. **Smyth, M. J.**: Glutathione modulates activation-dependent proliferation of human peripheral blood lymphocyte populations without regulating their activated function. J. Immunol. 146:1921-1927, 1991 **[84].**

24. Geller, R.L., **Smyth, M. J.**, Strobl, S. L., Bach, F. H., Ruscetti, F. W., Longo, D. L., and Ochoa, A. C.: Generation of lymphokine-activated killer activity in T cells: Possible regulatory circuits. J. Immunol. 146:3280-3288, 1991 **[33].**

25. **Smyth, M. J.**, Strobl, S. L., Young, H. A., Ortaldo, J. R., and Ochoa, A. C.: Regulation of lymphokine-activated killer activity and pore-forming protein gene expression in human peripheral blood $CD8^+$ T lymphocytes: Inhibition by transforming growth factor-β. J. Immunol. 146:3289-3297, 1991 **[166].**

26. Ortaldo, J. R., Mason, A. T., O'Shea, J. J., **Smyth, M. J.**, Falk, L. A., Kennedy, I. C. S., Longo, D. L., and Ruscetti, F. W.: Mechanistic studies of transforming growth factor-β inhibition of IL2-dependent activation of $CD3^-$ large granular lymphocyte functions: Regulation of IL-2Rβ [p75] signal transduction. J. Immunol. 146:3791-3798, 1991 **[80].**

27. **Smyth, M. J.**, Zachariae, C. O. C., Norihisa, Y., Ortaldo, J. R., Hishinuma, A., and Matsushima, K.: IL-8 gene expression and production in human peripheral blood lymphocyte subsets. J. Immunol. 146:3815-3823, 1991 **[88].**

28. Sayers, T. J., Sowder, R., Wiltrout, T., Wine, J., Henderson, L., Wiltrout, R. H., and **Smyth, M. J.**: A cytostatic protein isolated from natural killer cell granules. J. Cell. Biochem. 15:81, 1991 **[1].**

29. **Smyth, M. J.**, Norihisa, Y., Gerard, J., Young, H. A., and Ortaldo, J. R.: IL-7 regulation of cytotoxic lymphocytes. Pore-forming protein gene expression, interferon-γ production and cytotoxicity of human peripheral blood lymphocyte subsets. Cell. Immunol. 138:390-403, 1991 **[50].**

30. **Smyth, M. J.**, Norihisa, Y., and Ortaldo, J. R.: Multiple cytolytic mechanisms displayed by activated human peripheral blood T cell subsets. J. Immunol., 148:55-62, 1992 **[40].**

31. Sayers, T. J., Wiltrout, T., Sowder, R., Munger, W. L., **Smyth, M. J.**, and Henderson, L.: Purification of a factor from the granules of a rat natural killer cell line (RNK) that inhibits tumor cell growth: Molecular identity with a granule serine protease (RNKP-1). J. Immunol. 148:292-300, 1992 **[48].**

32. Loeffler, C. M., **Smyth, M. J.**, Longo, D. L., Kopp, W. C., Harvey, L. K., Tribble, H. J., Tase, J. E., Urba, W. J., Leonard, A. S., Young, H. A., and Ochoa, A. C.: Immunoregulation in cancer bearing hosts:down- regulation of gene expression and cytotoxic function in $CD8^+$ T cells. J. Immunol. 149:949-956, 1992 **[113].**

33. **Smyth, M. J.**: Mechanisms of cytotoxicity used by human peripheral blood T cell subsets. Transplantation Proc. 25:2321-2322, 1992 **[0].**

34. O'Shea, J. J., McVicar, D., Bailey, T. L., Burns, C., and **Smyth, M. J.**: Activation of human peripheral blood T lymphocytes by pharmacological induction of protein tyrosine phosphorylation. Proc. Natl. Acad. Sci. USA. 89:10306-10310, 1992 **[162].**

35. **Smyth, M. J.**, Wiltrout, T., Trapani, J. A., Ottaway, K. S., Sowder, R., Henderson, L., Powers, J., and Sayers, T. J.: Purification and cloning of a novel serine protease, RNK-Met-1, from the granules of a rat natural killer cell leukemia. J. Biol. Chem. 267:24418-24425, 1992 **[58].**

36. **Smyth, M. J.**: Generation and cytotoxic profile of human peripheral blood $CD4^+$ T lymphocytes. Immunol. Cell Biol. 70:379-390, 1992 **[3].**

37. Mottram, P. L., Pietersz, G. A., **Smyth, M. J.**, Purcell, L. J., Clunie, G. J. A., and McKenzie, I. F. C.: Evidence that an anthracycline-anti-CD8 immunoconjugate, idarubicin-anti-Ly-2.1, prolongs heart allograft survival in mice. Transplantation 55:484-490, 1993 **[9].**

38. **Smyth, M. J.**, Foster, H. McA., Andrew, S. M., Teh, J. G., Krauer, K., McKenzie, I. F. C., and Pietersz, G. A.: Immunochemotherapy of human colon carcinoma xenografts in nude mice using combinations of idarubicin-monoclonal antibody conjugates. Immunol. Cell. Biol. 71:167-179, 1993 **[10].**

39. **Smyth, M. J.** and Ortaldo, J.R.: Mechanisms of cytotoxicity used by human peripheral blood $CD4^+$ and $CD8^+$ T cell subsets. The role of granule exocytosis. J. Immunol. 151:740-747, 1993 **[26].**

40. Trapani, J. A., Browne, K. A, Dawson, M., and **Smyth, M. J.**: Immunopurification of functional cytotoxic T-lymphocyte/natural killer cell granzyme B (Asp-ase) activity using a monoclonal antibody. Biochem. Biophys. Res. Comm. 195:910-920, 1993 **[55].**

41. Thia, K.Y.T., **Smyth, M. J.,** and Trapani, J.A.: Expression of human perforin in a mouse cytotoxic T-lymphocyte cell line: evidence for perturbation of granule-mediated cytotoxicity. J. Leukoc. Biol. 54:528-533, 1993 **[3].**

42. **Smyth, M.J.**, Sayers, T.J., Wiltrout, T., Powers, J.C., and Trapani, J.A.: Met-ase: cloning and distinct chromosomal location of a serine protease preferentially expressed in natural killer cells. J. Immunol. 151:6195-6205, 1993 **[60].**

43. Baker, E., Sutherland, G. R., and **Smyth, M. J.**: The gene encoding a human natural killer cell granule serine protease, Met-ase 1, maps to chromosome 19p13.3. Immunogenetics 39:294-295, 1994 **[15].**

44. Sayers, T. J., Wiltrout, T., **Smyth, M. J.,** Ottaway, K. S., Pilaro, A. M., Sowder, R., Henderson, L. E., Sprenger, H., and Lloyd, A.: Purification and cloning of a novel serine protease, RNK-Tryp-2, from the granules of a rat natural killer cell leukemia. J.Immunol. 152:2289-2297, 1994 **[31].**

45. **Smyth, M.J.,** Kershaw, M. H., Hulett, M. D., McKenzie, I. F. C., and Trapani, J.A.: The 5' flanking region of the murine perforin gene targets expression of a human Fcγ receptor I to cytotoxic T lymphocytes. J.Leukoc. Biol. 55:514-522, 1994 **[8].**

46. Trapani, J. A., **Smyth, M. J.**, Apostolidis, V. A., and K. A. Browne.: Granule serine proteases are normal nuclear constituents of natural killer cells. J. Biol. Chem. 269:18359-18365, 1994 **[53].**

47. Baker, E., Sutherland, G. R., Sayers, T. J., and **Smyth, M. J.**: The genes encoding human NK granule serine proteases, human tryptase-2 (TRYP2) and human granzyme A (HFSP), both map to chromosome 5q11-q12 and define a new locus for cytotoxic lymphocyte granule tryptases. Immunogenetics 40:235-237, 1994 **[35].**

48. Thia, K. Y. T., Jenkins, N. A., Gilbert, D. J., Copeland, N. G., and **Smyth, M. J.**: The gene encoding a mouse natural killer cell granule serine protease, Met-ase 1, maps to mouse chromosome 10q21.2. Immunogenetics 41:47-49, 1995 **[8].**

49. **Smyth, M. J.**, Browne, K., Kinnear, B. F., Trapani, J. A., and Warren, H. S.: Distinct granzyme expression in human $CD3^-$ $CD56^+$ large granular- and $CD3^-$ $CD56^+$ small high density-lymphocytes displaying non-MHC-restricted cytolytic activity. J. Leukoc. Biol. 57:88-93, 1995 **[16].**

50. **Smyth, M. J.**, McGuire, M.J., and Thia, K. Y. T.: Expression of recombinant human granzyme B: a processing and activation role for dipeptidyl peptidase I. J. Immunol 154:6299-6305, 1995 **[115].**

51. **Smyth, M. J.,** Hulett, M. D., Thia, K. Y. T., Sayers, T. J., Carter, C. R. D., Young, H. A., and Trapani, J. A.: Cloning and characterization of a novel NK-cell specific serine protease gene and its functional 5'-flanking sequences. Immunogenetics 42:101-111, 1995 **[13].**

52. Apostolidis, V. A., Browne, K. A., **Smyth, M. J.**, and Trapani, J. A.: The peptide loop consisting of amino acids 139-157 of human granzyme B (fragmentin-2) contains an immunodominant epitope recognized by the mouse. Mol. Immunol. 32:909-917, 1995 **[7].**

53. **Smyth, M. J.**, O' Connor, M. D., Kelly, J. M., Ganesvaran, S., and Trapani, J.: Expression of recombinant human Met-ase-1: a NK cell-specific granzyme. Biochem. Biophys. Res. Comm. 217:675-683, 1995 **[18].**

54. Trapani, J. A., Browne, K. A., **Smyth, M. J.**, and Jans, D.: Localization of granzyme B in the nucleus. A putative role in the mechanism of cytotoxic lymphocyte-mediated apoptosis. J. Biol. Chem. 271:4127-4133, 1996 **[106].**

55. **Smyth, M. J.,** O'Connor, M. D., Trapani, J. A., Kershaw, M. H., and Brinkworth, R.: A novel substrate binding pocket interaction restricts the specificity of the human natural killer cell-specific serine protease, Met-ase-1. J. Immunol. 156, 4174-4181, 1996 **[29].**

56. Sayers, T. J., Lloyd, A. R., McVicar, D. W., O'Connor, M. D., Kelly, J. M., Carter, C. R. D., Wiltrout, T. A., and **Smyth, M. J.**: Cloning and expression of a second human NK cell granule tryptase, HNK-Tryp-2/granzyme 3. J. Leukoc. Biol. 59:763-768, 1996 **[27].**

57. Kershaw, M. H., Darcy, P., Hulett, M. D., Hogarth, P. M., Trapani, J. A., and **Smyth, M. J.**: Redirecting cytotoxic function: requirements for expression of chimeric single chain high affinity IgE receptors. J. Biol. Chem. 271:21214-21225, 1996 **[12].**

58. Kelly, J. M., Hulett, M. D., Thia, K. Y. T., O'Connor, M. D., and **Smyth, M. J.**: Cloning, characterization, and expression of mouse natural killer cell Met-ase. Immunogenetics. 44:340-350, 1996 **[27].**

59. **Smyth, M. J.**, Sutton, V. R., Kershaw, M. H., and Trapani, J. A.: Xenospecific cytotoxic T lymphocytes use perforin- and Fas-mediated lytic pathways. Transplantation 62:1529-1532,1996 **[34].**

60. Kershaw, M. H., Darcy, P. K., Trapani, J. A., and **Smyth, M. J.**: The use of chimeric human Fce receptor I to redirect cytotoxic T lymphocytes to tumors. J. Leukoc. Biol. 60:721-728, 1996 **[20].**

61. Ewoldt, G. R., Darcy, P. K., Snook, M. B., Hudig, D., and **Smyth, M. J.**: cDNA cloning of granzyme J. Immunogenetics. 45:452-454, 1997 **[4].**

62. Ewoldt, G. R., **Smyth, M. J.**, Darcy, P. K., Harris, J. L., Craik, C. S., Horowitz, B., Woodard, S. L., Powers, J. C., and Hudig, D.: P-4 and RNKP-7, new granzyme-like serine proteases expressed in activated rat lymphocytes. J. Immunol. 158:4574-4583, 1997 **[11].**

63. **Smyth, M. J.**, Kershaw, M. H., and Trapani, J. A.: Xenospecific cytotoxic T lymphocytes: potent perforin-mediated lysis in vitro and in vivo. Transplantation. 63:1171-1178, 1997 **[36].**

64. **Smyth, M. J.**: FasL-mediated bystander lysis of syngeneic cells in response to an allogeneic stimulus. J. Immunol. 158:5765-5772, 1997 **[31].**

65. **Smyth, M. J.**, Thia, K. Y. T., and Kershaw, M. H.: Xenogeneic mouse anti-human NK cytotoxicity is mediated via perforin. Xenotransplantation 4:78-84, 1997 **[15].**

66. **Smyth, M. J.,** Kershaw, M. H., and Darcy, P. K.**:** Xenospecific $CD8^+$ CTL generation: accessory function for $CD4^+$ T cells and $NK1.1^+$ cells. Transplantation 65:1278-1281, 1998 **[5].**

67. Darcy, P. K., Kershaw, M. H., Trapani, J. A., and **Smyth, M. J.**: Expression in CTL of a single chain anti-CEA antibody. Redirected Fas ligand-mediated lysis of colon carcinoma. Eur. J. Immunol. 28:1663-1672, 1998 **[58].**

68. **Smyth, M. J.**, Kershaw, M. H., Darcy, P. K., and Trapani, J. A.: Adoptive transfer: the role of perforin in CTL rejection of human tumors in vivo. Xenotransplantation 5:146-153, 1998 **[13].**

69. Trapani, J. A., Jans, P, **Smyth, M. J.**, Froelich, C. J., Williams, E. A., Sutton, V. R., and Jans, D. A.: Perforin-dependent nuclear entry of granzyme B precedes apoptosis and is not a

consequence of nuclear membrane dysfunction. Cell Death & Differentiation. 5:488-496, 1998 **[71].**

70. **Smyth, M. J.,** Krasovskis, E., and Johnstone, R. W.: FasL-mediated lysis of self bystander targets by human papilloma virus-specific $CD8^+$ CTL. J. Virology. 72:5948-5954, 1998 **[19].**

71. **Smyth, M. J.**, Krasovskis, E., Sutton, V. R., and Johnstone, R. W.: The drug efflux protein, P-glycoprotein, additionally protects drug-resistant tumor cells from multiple forms of caspase-dependent apoptosis. Proc. Natl. Acad. Sci. USA 95:7024-7029, 1998 **[361].**

72. Kershaw, M. H., Darcy, P. K., Trapani, J. A., MacGregor, D., and **Smyth, M. J.**: Tumor-specific IgE-mediated inhibition of human colorectal carcinoma xenograft growth. Oncol. Res. 10:133-142, 1998 **[38].**

73. Trapani, J. A., Jans, D. A., Jans, P. J., **Smyth, M. J.**, Browne, K. A., and Sutton, V. R.: Efficient nuclear targeting of granzyme B and the nuclear consequences of apoptosis induced by cytolytic lymphocyte granules are caspase-dependent, but cell death is caspase-independent. J. Biol. Chem. 273:27934-27938, 1998 **[174].**

74. **Smyth, M. J.**, Kelly, J. M., Baxter, A. G., Korner, H., and Sedgwick, J. D.: An essential role for tumor necrosis factor in NK cell-mediated tumor rejection in the peritoneum. J. Exp. Med. 188:1611-1619, 1998 **[124].**

75. **Smyth, M. J.,** and Sedgwick, J. D.: Delayed kinetics of tumor necrosis factor-mediated bystander lysis by peptide-specific $CD8^+$ cytotoxic T lymphocytes. Eur. J. Immunol. 28:4162-4169,1998 **[28].**

76. Haynes, N. M., **Smyth, M. J.**, Kershaw, M. H., Trapani, J. A., and Darcy, P. K.: Fas ligand-mediated lysis of *erbB*-2 expressing tumor cells by redirected cytotoxic T lymphocytes. Cancer Immun. Immunother. 47:278-286, 1999 **[30].**

77. Johnstone, R. W., Cretney, E., and **Smyth, M. J.**: P-glycoprotein protects leukemia cells against caspase-dependent, but not caspase-independent cell death. BLOOD 93:1075-1085, 1999 **[376].**

78. **Smyth, M. J.**, Thia, K. Y. T., Cretney, E., Kelly, J. M., Snook, M. B., Forbes, C. A., and Scalzo, A. A.: Perforin is a major contributor to NK cell control of tumor metastasis. J. Immunol. 162:6658-6662, 1999 **[243].**

79. **Smyth, M. J.**, Johnstone, R. W., Cretney, E., Haynes, N., Sedgwick, J. D., Korner, H., Poulton, L. D., and Baxter, A. G.: Multiple deficiencies underlie NK cell inactivity in lymphotoxin-α-deficient mice. J. Immunol. 163:1350-1353, 1999 **[46].**

80. Cretney, E., Degli-Esposti, M., Densley, E. H., Farrell, H. E., Davis-Poynter, N., and **Smyth, M. J.**: m144, a murine cytomegalovirus (MCMV) encoded MHC class I homolog, confers tumor resistance to NK cell-mediated rejection. J. Exp. Med. 190:435-443, 1999 **[80].**

81. **Smyth, M. J.**, and Snook, M. B.: Perforin-dependent cytolytic responses in β2-microglobulin-deficient mice. Cell. Immunol. 196:51-59, 1999 **[23].**

82. **Smyth, M. J.**, and Kelly, J. M.: Accessory function for $NK1.1^+$ NK cells producing interferon-γ in xenospecific cytotoxic T lymphocyte differentiation. Transplantation 68:840-843, 1999 **[23].**

83. Hammond, K. J. L., Pelikan, S. B., Crowe, N. Y., Hooi, H. L. C., Randle-Barrett, E., **Smyth, M. J.**, Baxter, A. G., van Driel, I. R., Scollay, R., Godfrey, D. I.: NKT cells are a phenotypically and functionally diverse population. Eur. J. Immunol. 29:3768-3781, 1999 **[265].**

84. Zhang, J., Scordi, I., **Smyth, M. J.**, and Lichtenheld, M. G.: Perforin gene activation by IL-2R signals involves two enhancers and Stat5. J. Exp. Med. 190:1297-1307, 1999 **[93].**

85. Korner, H., Cretney, E., Wilheim, P., Kelly, J. M., Rollinghoff, M., Sedgwick, J. D., and **Smyth, M. J.**: Tumor necrosis factor sustains the generalised lymphoproliferative disorder (*gld*) phenotype. J. Exp. Med. 191:89-96, 2000 **[52].**

86. **Smyth, M. J.**, Thia, K. Y. T., Street, S. E. A., Cretney, E., Trapani, J. A., Taniguchi, M., Kawano, T., Pelikan, S., Crowe, N. Y., and Godfrey, D. I.: Differential tumor surveillance by NK and NKT cells. J. Exp. Med. 191:661-668, 2000 **[713].**

87. Ruefli, A., **Smyth, M. J.**, and Johnstone, R. W.: HMBA induces activation of a caspase-independent cell death pathway to overcome P-glycoprotein mediated multidrug resistance. BLOOD 95:2378-2385, 2000 **[127].**

88. Darcy, P. K., Haynes, N. M., Snook, M. B., Trapani, J. A., Cerutti, L., Jane, S. M., and **Smyth, M. J.**: Redirected perforin-dependent rejection of colon carcinoma by ex-vivo genetically engineered primary cytotoxic T lymphocytes. J. Immunol. 164:3705-3712, 2000 **[68].**

89. Sayers T.J., Brooks, A. D., Seki, N., **Smyth, M. J.**, Yagita, H., Blazar, B. R., and Malyguine,A. M.: T cell lysis of murine renal cancer : multiple signaling pathways for cell death via Fas. J. Leukoc. Biol. 68:81-86, 2000 **[29].**

90. **Smyth, M. J.**, Thia, K. Y. T., Street, S. E. A., MacGregor, D., Godfrey, D. I., and Trapani, J. A.: Perforin-mediated cytotoxicity is critical for surveillance of spontaneous lymphoma. J. Exp. Med. 192:755-760, 2000 **[486].**

91. **Smyth, M. J**., Taniguchi M, and Street, S. E. A: The anti-tumor activity of IL-12: mechanisms of innate immunity that are model- and dose-dependent. J. Immunol. 165:2665-2670, 2000 **[239].**

92. Tainton, K. M., Ruefli, A. A., **Smyth, M. J**., and Johnstone, R. W. Equivalent death of P-glycoprotein expressing and non-expressing cells induced by the protein kinase C inhibitor staurosporine. Biochem. Biophys. Res. Comm. 276:231-237, 2000 **[14].**

93. Davis, J., Sutton, V. R., **Smyth, M. J.**, and Trapani, J. A.: Dependence of granzyme B-mediated cell death on a pathway regulated by Bcl-2 or its viral analog, BHRF1. Cell Death & Differentiation. 7:973-983, 2000 **[55].**

94. Haynes, N. M., Snook, M. B., Trapani, J. A., Cerruti, L., Jane, S. M., Darcy, P. K., and **Smyth, M. J.:** Redirecting mouse cytotoxic T lymphocytes against colon carcinoma : superior signaling efficacy of scFv chimeras containing TCR-ζ versus FcεRIγ. J. Immunol. 166:182-187, 2001 **[105].**

95. Street, S. E. A., Cretney, E., and **Smyth, M. J.**: Perforin and interferon-γ activities independently control tumor initiation, growth and metastasis. BLOOD. 97:192-197, 2001 **[467].**

96. Takeda, K., Hayakawa, Y., **Smyth, M. J.,** Kayagaki, N., Yamaguchi, N., Kakuta, S, Iwakura, Y., Yagita, H., and Okumura, K.: Involvement of tumor necrosis factor-related apoptosis-inducing ligand in surveillance of tumor metastasis by liver NK cells. Nature Medicine. 7:94-100, 2001 **[605].**

97. Sayers, T. J., Brooks, A. D., Ward, J. M., Hoshino, T., Bere, W. E., Wiegand, G. W., Kelly, J. M., and **Smyth, M. J.**: The restricted expression of granzyme M (grzM, met-ase) in human lymphocytes. J. Immunol. 166:765-771, 2001 **[95].**

98. Davis, J. E., Trapani, J. A., and **Smyth, M. J.:** Granzyme A and B-deficient killer lymphocytes are defective in eliciting DNA fragmentation but retain potent in vivo anti-tumour capacity. Eur. J. Immunol. 31:39-47, 2001 **[86].**

99. **Smyth, M. J.,** Cretney, E., Takeda, K., Wiltrout, R. W., Sedger, L., Kayagaki, N., Yagita, H., and Okumura, K.: Tumor necrosis factor related apoptosis-inducing ligand (TRAIL) contributes to IFN-γ-dependent NK cell protection from tumor metastasis. J. Exp. Med. 193:661-670, 2001 **[446].**

100. **Smyth, M. J.,** Crowe, N. Y., and Godfrey, D. I.: NK cells and NKT cells collaborate in host protection from MCA-induced fibrosarcoma. Int. Immunol. 13:459-463, 2001 **[344].**

101. Johnstone, R. W., Tainton, K. M., Ruefli,A. A., Cerutti, L., Jane, S. M., and **Smyth, M. J.:** P-glycoprotein does not protect cells against cytolysis induced by pore-forming proteins. J. Biol. Chem. 276:16667-16673, 2001 **[36].**

102. Poulton, L. D., **Smyth, M. J.**, Hawke, C. G., Silveira, P., Shepherd, D., Naidenko, O. V., Godfrey, D. I., and Baxter, A. G.: Cytometric and functional analyses of NK and NKT cell deficiencies in NOD mice. Int. Immunol. 13:887-896, 2001 **[163].**

103. Ruefli, A. A., Ausserlechner, M. J., Bernhard, D., Tainton, K, Kofler, R., **Smyth, M. J.**, and Johnstone, R. W.: The histone deacetylase inhibitor and chemotherapeutic agent suberoylanilide hydroxamic acid (SAHA) induces a novel cell death pathway characterized by Bid cleavage and ROS production. Proc. Natl Acad. Sci. USA 98:10833-10838, 2001 **[463].**

104. Takeda, K., **Smyth, M. J.,** Cretney, E., Hayakawa, Y., Yamaguchi, N., Yagita, H., and Okumura K.: Involvement of tumor necrosis factor-related apoptosis-inducing ligand in NK cell-mediated and IFN-γ-dependent suppression of subcutaneous tumor growth. Cell. Immunol. 214:194-200, 2001 **[117].**

105. Kelly, J. M., Darcy, P. K., Markby J. L., Godfrey, D. I., Takeda, K., Yagita, H., and **Smyth, M. J.**: Induction of tumor specific T cell memory by NK cell-mediated tumor rejection. Nature Immunology 3:83-90, 2002 **[295].** http://www.f1000biology.com/article/11743585/evaluation

106. Takeda, K., **Smyth, M. J.,** Cretney, E., Hayakawa, Y., Kayagaki, N., Yagita, H., and Okumura, K.: Critical role for tumor necrosis factor-related apoptosis-inducing ligand in innate immune surveillance against tumors. J. Exp. Med. 195:161-169, 2002 **[440].**

107. Cretney, E., Takeda, K., Yagita, H., Glaccum, M., Peschon, J., and **Smyth, M. J.:** Increased susceptibility to tumor initiation and metastasis in tumor necrosis factor-related apoptosis-inducing ligand (TRAIL)-deficient mice. J. Immunol. 168:1356-1361, 2002 **[614].**

108. **Smyth, M. J.**, Crowe, N. Y., Pellici, D., Kyparissoudis, K., Kelly, J. M., Takeda, K., Yagita, H., and Godfrey, D. I.: Sequential production of interferon-gamma by NK1.1(+) T cells and natural killer cells is essential for the antimetastatic effect of alpha-galactosylceramide. BLOOD 99:1259-1266, 2002 **[320].**

109. Pellicci, D. G., Hammond, K. J. L., Uldrich, A. S., Baxter, A., **Smyth, M. J.,** and Godfrey, D. I.: NKT cells develop through a thymus-dependent $NK1.1^{-}CD4^{+}$ CD1d-restricted precursor stage. J. Exp. Med. 195:835-844, 2002 **[317].**

110. Seki, N., Brooks, A. D., Back, T. C., Carter, C. R. D., Parsoneault, E. M., **Smyth, M. J.,** Wiltrout, R. H., and Sayers, T. J.: Tumor-specific CTL kill murine renal cancer cells using both perforin and Fas ligand-mediated lysis in vitro, but cause tumor regression in vivo in the absence of perforin. J. Immunol. 168:3484-3492, 2002 **[119].**

111. Kelly, J. M., Takeda, K., Darcy, P. K., Yagita, H., and **Smyth, M. J.:** A role for IFN-γ in primary and secondary immunity generated by NK cell-sensitive tumor expressing CD80 in vivo. J. Immunol. 168:4472-4479, 2002 **[56].**

112. Ruefli, A. A., Bernhard, D., Tainton, K., Kofler, R., **Smyth, M. J.,** and Johnstone, R. W.: The histone deacetylase inhibitor and chemotherapeutic agent suberoylanilide hydroxamic acid (SAHA) overcomes multidrug resistance and induces cell death in P-gp expressing human leukemia cells. Int. J. Cancer 99:292-298, 2002 **[86].**

113. Crowe, N. Y., Godfrey, D. I.*, and **Smyth, M. J.*:** A critical role for NKT cells in immunosurveillance of methycholanthrene-induced sarcomas. J. Exp. Med. 196:119-127, 2002 **[276].** http://www.f1000biology.com/article/12093876/evaluation

114. Street, S. E. A., Trapani, J. A., MacGregor, D., and **Smyth, M. J.**: Suppression of lymphoma and some epithelial malignancies effected by interferon-γ. J. Exp. Med. 196:129-134, 2002 **[331].**

115. Pulaski, B., **Smyth, M. J.,** and Ostrand-Rosenberg, S.: IFN-γ-activated phagocytic cells are a critical component of innate immunity. Cancer Res. 62:4406-4412, 2002 **[53].**

116. Hayakawa, Y., Takeda, K., Yagita, H., **Smyth, M. J.,** Van Kaer, L., Okumura, K., and Saiki, I.: IFN-γ-mediated inhibition of tumor angiogenesis by natural killer T cell ligand, α-galactosylceramide. BLOOD 100:1728-1733, 2002 **[148].**

117. Cretney, E., Street, S. E. A., and **Smyth, M. J.:** TNF contributes to the immunopathology of perforin/Fas ligand double deficiency. Immunol. Cell. Biol. 80:436-440, 2002 **[5].**

118. Haynes, N. M., Trapani, J. A., Teng, M. W. L., Jackson, J., Jane, S. M., Cerutti, L., Kershaw, M. H., Darcy, P. K., and **Smyth, M. J.**: Single chain antigen recognition receptors that co-stimulate potent rejection of established experimental tumors. BLOOD 100:3155-3163, 2002 **[141].**

119. Hayakawa, Y., Kelly, J. M., Westwood, J., Darcy, P. K., Diefenbach, A., Raulet, D., and **Smyth, M. J.:** Tumor rejection mediated by NKG2D receptor-ligand interaction is dependent on perforin. J. Immunol. CUTTING EDGE 169:5377-5381, 2002 **[176].**

120. Haynes, N. M., Trapani, J. A., Teng, M. W. L., Jackson, J. T, Jane, S. M., Cerutti, L., Kershaw, M. H., Darcy, P. K., and **Smyth, M. J.:** Rejection of syngeneic colon carcinoma by cytotoxic T lymphocytes expressing single chain antibody receptors capable of delivering CD28 co-stimulation. J. Immunol. 169:5780-5786, 2002 **[107].**

121. Ruefli A. A., Tainton, K., Darcy, P. K., **Smyth, M. J.**, and Johnstone R. W.: P-glycoprotein inhibits caspase-8 activation but not formation of the death inducing signal complex (DISC) during Fas-mediated apoptosis. Cell Death and Differentiation. 9:1266-1272, 2002 **[93].**

122. Seki, N., Hayakawa, Y., Brooks, A. D., Wine, J., Wiltrout, R. H., Yagita, H., Tanner, J. E., **Smyth, M. J.,** and Sayers, T. J.: Tumour necrosis factor related apoptosis-inducing ligand-mediated apoptosis is an important endogenous mechanism for resistance to liver metastases in murine renal cancer. Cancer Res. 63:207-213, 2003 **[97].**

123. van Dommelen, S., Tabarias, H. A., **Smyth, M. J.,** and Degli-Esposti, M. A.: Activation of $NK1.1^+$ T cells enhances the anti-viral response mediated by natural killer cells during murine cytomegalovirus infection. J. Virol. 77:1877-1884, 2003 **[133].**

124. Andrews, D. M., Scalzo A. A., Yokoyama, W. M., **Smyth, M. J.,** and Degli-Esposti, M. A.: Functional interactions between dendritic cells and NK cells during viral infection. Nature Immunology 4:175-181, 2003 **[307].**

125. Krenacs, L., **Smyth, M. J.,** Bagdi, E., Krenacs, T., Rudiger, T., Zettl., A. Muller-Hermelink, H. K., Jaffe, E. S, and Raffeld, M: NK cell-restricted serine protease granzyme M is preferentially expressed in NK cell, γδ T-cell, and intestinal T-cell lymphomas, suggesting that these tumors might arise from lymphocytes involved in innate immunity. BLOOD 101:3590-3593, 2003 **[70].**

126. Curcio, C., Di Carlo, E., Clynes, R., **Smyth, M. J.,** Boggio, K., Quaglino, E., Spadaro, M., Colombo, M. P., Amici, A., Lollini, P. L., Musiani, P., and Forni, G.: Combination of antibody, cytokines, and perforin is required for the eradication of established Her-2/neu carcinomas following gene gun DNA vaccination. J. Clin. Invest. 111:1161-1170, 2003 **[123].**

127. **Smyth, M. J.,** Street, S. E. A., and Trapani, J. A.: Granzymes A and B are not required for perforin-mediated tumor rejection. J. Immunol. CUTTING EDGE. 171:515-518, 2003 **[91].**

128. Stewart, T., **Smyth, M. J.,** Fernando, G., Frazer, I. H., and Leggatt, G. R.: Inhibition of early tumor growth requires Jα18 positive NKT cells. Cancer Res. 63:3058-3060, 2003 **[47].**

129. Pellici, D.G., Uldrich, A. P., Kyparissoudis, K., Brooks, A. G., Sidobre, S., Kronenberg, M., **Smyth, M. J.,** and Godfrey, D. I.: Intrathymic NKT cell development is blocked by the presence of α-galactosylceramide. Eur. J. Immunol. 33:1816-1823, 2003 **[56].**

130. Cretney, E., Uldrich, A. P., Berzins, S. P., Strasser, A., Godfrey, D. I., and **Smyth, M. J.:** Normal thymocyte negative selection in TRAIL-deficient mice. J. Exp. Med. 198:491-496, 2003 **[71].**

131. Hayakawa, Y., Rovero, S., Forni, G., and **Smyth, M. J.:** α-galactosylceramide (KRN7000) suppression of chemical and oncogene-dependent carcinogenesis. Proc. Natl. Acad. Sci. USA 100:9464-9469, 2003 **[130].**

132. Tajima, A., Tanaka, T., Ebata, T., Takeda, K., Kawasaki, A., Kelly, J. M., Darcy, P. K., Vance, R. E., Raulet, D. H., Kinoshita, K., Okumura, K., **Smyth, M. J.,** and Yagita, H.: Blastocyst MHC, a putative murine homologue of HLA-G, protects TAP-deficient tumor cells from natural killer cell-mediated rejection *in vivo*. J. Immunol. 171:1715-1721, 2003 **[35].**

133. Crowe, N. Y., Uldrich, A. P., Kyparissoudis, Pellici, D. G., Hammond, K. J. L., Hayakawa, Y., Sidobre, S., Kronenberg, M., **Smyth, M. J.,** and Godfrey, D. I.: Glycolipid antigen drives rapid expansion and sustained cytokine production by NKT cells. J. Immunol. 171:4020-4027, 2003 **[273].**

134. Westwood, J. A., Kelly, J. M., Tanner, J. E., Kershaw, M. H., Hayakawa, Y., and **Smyth, M. J.:** Novel priming of tumor-specific immunity by NKG2D-triggered NK cell-mediated tumor rejection and Th1-independent CD4+ T cell pathway. J. Immunol. CUTTING EDGE 172:757-761, 2004 **[49].**

135. Hayakawa, Y., Screpanti, V., Yagita H., Gradien, A., Ljunggren, H-G., **Smyth, M. J.,** and Chambers, B. J.: NK cell TRAIL eliminates immature DC in vivo and limits DC vaccination efficacy. J. Immunol. 172: 123-129, 2004 **[189].**

136. Dyer, C. M., Zhan, Y., Brady, J. L., Carbone, F. R., **Smyth, M. J.,** and Lew, A. M.: Unexpectedly, induction of cytotoxic T lymphocytes enhanced the humoral response after DNA immunization. BLOOD 103:3073-3075, 2004 **[5].**

137. Brady, J., Hayakawa, Y., **Smyth, M. J.,** and Nutt, S. L.: Interleukin-21 induces the functional maturation of murine natural killer cells. J. Immunol. 172: 2048-2058, 2004 **[241].**

138. Takeda, K., Yamaguchi, N., Akiba, H., Hayakawa, Y., Tanner, J. E., Okumura, K., Yagita, H., and **Smyth, M. J.:** Antibody-dependent TRAIL death receptor-mediated therapy promotes T cell memory to tumors. J. Exp. Med. 199:437-448, 2004 **[205].**

139. Hayakawa, Y., Godfrey, D. I., and **Smyth, M. J.:** α-galactosylceramide: a potential immunomodulatory activity and future application. Curr. Med. Chem. 11:241-252, 2004 **[79].**

140. Rukamp, B., Kam, C-M., Natarajan, S., Bolton, B. W., **Smyth, M.J.,** Kelly, J. M., and Powers, J.: Substrate specificities of granzyme M: a study of inhibitors and newly synthesized thiobenzyl ester substrates. Archives Biohem. Biophys. 422:9-22, 2004 **[20].**

141. Street, S. E. A., Hayakawa, Y., Tanner, J., Zhan, Y., Lew, A. M., MacGregor, D., Raulet, D., Diefenbach, A., Yagita, H., Godfrey, D. I., and **Smyth, M. J.**: Innate immune surveillance of spontaneous lymphomas of B cell origin. J. Exp. Med. 199:879-884, 2004 **[193].**

142. Moeller, M., Haynes, N. M., Trapani, J. A., Teng, M. W. L., Jackson, J. T., Tanner, J. E., Cerutti, L., Jane, S. M., Kershaw, M. H., **Smyth, M. J.,** and Darcy, P. K.: A functional role for CD28 co-stimulation in tumor recognition by single-chain receptor-modified T cells. Cancer Gene Therapy. 11:371-379, 2004 **[45].**

143. Kelly, J. M., Waterhouse, N. J., Cretney, E., Browne, K. A., Ellis, S. Trapani, J. A., and **Smyth, M. J.:** Granzyme M mediates a novel form of perforin-dependent cell death. J. Biol. Chem. 279:22236-22242, 2004 **[128].**

144. Tainton, K. M., **Smyth, M. J.,** Jackson, J. T., Tanner, J. E., Cerruti, L., Jane, S. M., Darcy, P. K., and Johnstone, R. W.: Mutational analysis of P-gp: maintenance of drug resistance in the absence of ATP-dependent drug efflux. Cell Death and Differentiation 11:1028-1037, 2004 **[81].**

145. Berzins, S. P., Uldrich, A. P., Pellici, D. G., McNab, F., Hayakawa, Y., **Smyth, M. J.,** and Godfrey, D. I.: Parallels and distinctions between T and NKT cell development in the thymus. Immunol. Cell Biol. 82:269-275, 2004 **[47].**

146. Berzins, S. P., Kyparisssoudis, K., Pellici, D. G., Hammond, K. J. L., Sidobre, S., Baxter, A., **Smyth, M. J.,** Kronenberg, M., and Godfrey, D. I.: Systemic NKT-cell deficiency in NOD mice is not detected in peripheral blood: implications for human studies. Immunol. Cell Biol. 82:247-252, 2004 **[55].**

147. Teng, M. W. L., Kershaw, M. H., Moeller, M., Darcy, P. K., and **Smyth, M. J.:** Immunotherapy of cancer using systemically delivered gene-modified human T lymphocytes. Human Gene Therapy 15:699-708, 2004 **[44].**

148. Kershaw, M. H., Jackson, J. T., Haynes, N. M., Teng, M. W. L., Moeller, M., Hayakawa, Y., Cameron, R., Tanner, J. E., Trapani, J. A., Darcy, P. K., and **Smyth, M. J.:** Gene-engineered T cells as a superior adjuvant therapy for metastatic cancer. J. Immunol. 173:2143-2150, 2004 **[46].**

149. Chen, W., Pang, K., Masterman, K. A., Kennedy, G., Basta, S., Dimopoulos, N., Hornung, F., **Smyth, M. J.,** Bennik, J. R., and Yewdell, J. W.: Reversal in the immunodominance hierarchy in secondary $CD8^+$T cell responses to influenza A virus: roles for cross-presentation and lysis-independent immunodomination. J. Immunol. 173:5021-5027, 2004 **[72].**

150. Voskoboinik, I., Gouel, M-C, De Bono, A., Browne, K. A., Cretney, E., Darcy, P. K., Jane, S. M., **Smyth, M. J.,** and Trapani, J. A.: The functional basis for hemophagocytic lymphohistiocytosis in a patient with co-inherited missense mutations in the perforin (Pfn1) gene. J. Exp. Med. 200:811-816, 2004 **[71].**

151. **Smyth, M. J**., Swann, J., Kelly, J. M., Cretney, E., Yokoyama, W. M., Diefenbach, A., Sayers, T. J., and Hayakawa, Y.: NKG2D recognition and perforin effector function mediates effective cytokine immunotherapy of cancer. J. Exp. Med. 200:1325-1335, 2004 **[139].**

152. Takeda, K., Cretney, E., Hayakawa, Y., Akiba, H., Yagita, H., Okumura, K., and **Smyth, M. J.:** TRAIL identifies immature natural killer cells in newborn mice and adult mouse liver. BLOOD. 105:2082-2089, 2005 **[156].**

153. Voskoboinik, I., Thia, M-C., Fletcher, J., De Bono, A., Browne, K., **Smyth, M. J**., and Trapani, J. A.: Calcium-dependent plasma membrane binding and cell lysis by perforin are mediated through its C2 domain. J. Biol. Chem. 280:8426-8434, 2005 **[119].**

154. Akhurst, B., Husk, K., **Smyth, M. J.,** Abraham, L. J., and Yeoh, G. C. T.: Differential LTβ and IFNγ signalling during mouse liver regeneration induced by chronic and acute injury. Hepatology. 41:327-335, 2005 **[108].**

155. Vincan, E., Darcy, P. K., **Smyth, M. J.,** Thompson, E., Thomas, R. J. S., Phillips, W. A., and Ramsay, R.G.: Frizzled-7 receptor ectodomain expression in a colon cancer cell line induces morphological change and attenuates tumour cell growth. Differentiation 73:142-153, 2005 **[48].**

156. Ota, T., Takeda, K., Akiba, H., Hayakawa, Y., Ogasawara, K., Ikarashi, Y., Miyake, S., Wakasugi, H., Yamamura, Y., Kronenberg, M., Raulet, D. H., Kinoshita, K., Yagita, H., **Smyth, M. J.,** and Okumura, K.: IFN-γ-mediated negative feedback regulation of NKT cell function by CD94/NKG2. BLOOD 106:184-192, 2005 **[52].**

157. Ludford-Menting, M. J., Oliaro, J., Sacirbegovic, F., Cheah, E. T-Y., Pederson, N., Thomas, S., Pasam, A., Iazzolino, R., Dow, L. E., Waterhouse, N. J., Tanner, J., Murphy, A., **Smyth, M. J.,** Kershaw, M. H., Darcy, P. K., Humbert, P. O., and Russell, S. M.: A network of PDZ-containing proteins regulate T cell polarity and morphology during motility and immunological synapse formation. Immunity 22:737-748, 2005 **[211].**

158. Berzins, S. P., Cochrane, A. D., Pellicci, D. G., **Smyth, M. J.,** and Godfrey, D. I.: Limited correlation between human thymus and blood NKT cell content revealed by an ontogeny study of paired tissue samples. Eur. J. Immunol. 35:1399-1407, 2005 **[75].**

159. **Smyth, M. J.,** Wallace, M. E., Yagita, H., Nutt, S. L., Godfrey, D. I., and Hayakawa, Y.: Sequential activation of NKT cells and NK cells provides effective innate immunotherapy of cancer. J. Exp. Med. 201:1973-1985, 2005 **[146].**

160. Pellicci, D. G., Hammond, K. J. L., Coquet, J., Kyparissoudis, K., Brooks, A., Kedzierska, K., Keating, R., Turner, S., **Smyth, M. J.,** and Godfrey, D. I.: DX5/CD49b positive T cells are not synonymous with CD1d-dependent NKT cells. J. Immunol. 175:4416-4425, 2005 **[37].**

161. Uldrich, A. P., Crowe, N. Y., Kyparissoudis, K., Pellicci, D. G., Zhan, Y., Lew, A., Bouillet, P., Strasser, A., **Smyth, M. J.,** and Godfrey, D. I.: NKT cell stimulation with glycolipid antigen in vivo: costimulation-dependent expansion, Bim-dependent contraction, and subsequent hyporesponsiveness to further antigenic challenge. J. Immunol. 175:3092-3101, 2005 **[145].**

162. Takaki, R., Hayakawa, Y., Nelson, A., Sivakumar, P., Hughes, S., **Smyth, M. J.,** and Lanier, L. L.: IL-21 enhances tumor rejection through an NKG2D-dependent mechanism. J. Immunol. 175:2167-2173, 2005 **[99].**

163. **Smyth, M. J.,** Swann, J., Cretney, E., Zerafa, N., Yokoyama, W., and Hayakawa, Y.: NKG2D protects the host from tumor initiation. J. Exp. Med. 202:583-588, 2005 **[262].**

164. McNab, F., Berzins, S. P., Pellicci, D. G., Kyparissoudis, K., Field, K., **Smyth, M. J.,** and Godfrey, D. I.: The influence of CD1d in post-selection NKT cell maturation and homeostasis. J. Immunol. 175:3762-3268, 2005 **[93].**

165. Pao, L. I., Sumaria, N, Kelly, J. M., van Dommelen, S., Cretney, E., Wallace, M. E., Anthony, D. A., Uldrich, A. P., Godfrey, D. I., Papadimitriou, J. M., Mullbacher, A., Degli-Esposti, M. A., and **Smyth, M. J.:** Functional analysis of granzyme M and its role in immunity to infection. J. Immunol. 175:3235-3243, 2005 **[51].**

166. Cretney, E., McQualter, J. L., Kayagaki, N., Yagita, H., Bernard, C. C. A., Grewal, I., Ashkenazi, A., and **Smyth, M. J.:** Tumor necrosis related apoptosis-inducing ligand (TRAIL)/Apo2L suppresses EAE in mice. Immunol. Cell Biol. 83:511-519, 2005 **[66]. ICB PAPER OF THE YEAR.**

167. Suck, G, Branch, D. R., **Smyth, M. J.,** Vergidis, J., Fahim, S., and Keating, A.: KHYG-1, a model for the study of enhanced natural killer cytotoxicity. Exp. Haematol. 33:1160-1171, 2005 **[58].**

169. Moeller, M., Haynes, N. M., Kershaw, M. H., Jackson, J. T., Teng, M. W. L., Street, S. E. A., Cerutti, L., Jane, S. M., Trapani, J. A., **Smyth, M. J**., and Darcy, P. K.: Adoptive transfer of gene-engineered $CD4^+$ helper T cells induces potent primary and secondary tumor rejection. BLOOD 106:2995-3003, 2005 **[62].**

170. Zerafa, N., Westwood, J., Cretney, E., Mitchell, S., Waring, P., Iezzi, M., Musiani, P., Forni, G., and **Smyth, M. J.:** TRAIL deficiency accelerates hematological malignancies. J. Immunol. CUTTING EDGE. 175:5586-5590, 2005 **[136].**

171. Morris, E. S., MacDonald, K. P. A., Rowe, V., Banovic, T., Kuns, R, Don, A, Bofinger, H. M., Burman, A. C., Oliver, S., Kienzle, N., Porcelli, S. A., Pellicci, D. D., Godfrey, D. I., **Smyth, M. J.,** and Hill, G. R.: NKT cell-dependent leukemia eradication following stem cell mobilization with potent G-CSF analogs. J. Clin. Invest. 115:3093-3103, 2005 **[105].**

172. Teng, M. W. L., Kershaw, M. H., Hayakawa, Y., Darcy, P. K., and **Smyth, M. J.:** T cells engineered with DAP-12 mediate effector function in an NKG2D-dependent and MHC-independent manner. J. Biol. Chem. 280:38235-38241, 2005 **[8].**

173. Crowe, N. Y., Berzins, S. P., Coquet, J. M., Kyparissoudis, K., Keating, R., Pellici, D. G., Godfrey, D. I., and **Smyth, M. J.:** Differential anti-tumor immunity mediated by NKT cell subsets in vivo. J. Exp. Med. 202:1279-1288, 2005 **[304].** [Comment Nature Reviews Immunology 5:903, 2005].

174. Terabe, M., Swann, J., Ambrosino, E., Sinha, P., Takaku, S., Hayakawa, Y., Godfrey, D. I., Ostrand-Rosenberg, S., **Smyth, M. J.,** and Berzofsky, J. A.: A non-classical non-Vα14Jα18 CD1d-restricted (type II) NKT cell is sufficient for a down regulation of tumor immunosurveillance. J. Exp. Med. 202:1627-1633, 2005 **[224].**

175. Westwood, J. A., **Smyth, M. J.,** Teng, M. W. L., Moeller, M., Trapani, J. A., Scott, A. M., Smyth, F. E., Cartwright, G. A., Power, B. E., Honemann, D., Prince, H. M., Darcy, P. K., and Kershaw, M. H.: Adoptive transfer of T cells modified with a humanized chimeric receptor gene inhibits growth of Lewis-Y expressing tumors in mice. Proc. Natl. Acad. Sci. USA. 102:19051-19056, 2005 **[85].**

176. Cornish, A. L., Keating, R., Kyparissoudis, K., Stock, A. T., Allan, R. S., Jones, C. M., **Smyth, M. J.,** Carbone, F. R., and Godfrey, D. I.: NKT cells are not critical for HSV-1 disease resolution. Immunol. Cell. Biol. 84:13-19, 2006 **[32].**

177. **Smyth, M. J.,** Teng, M. W. L., Swann, J., Kyparissoudis, K., Godfrey, D., and Hayakawa, Y.: $CD4^+CD25^+$ T regulatory cells suppress NK cell-mediated immunotherapy of cancer. J. Immunol. 176:1582-1587, 2006 **[336].**

178. Hayakawa, Y., and **Smyth, M. J.:** CD27 dissects mature NK cells into two subsets with distinct responsiveness and migratory capacity. J. Immunol. 176:1517-1524, 2006 **[418].**

179. Cretney, E., Shanker, A., Yagita, H., **Smyth, M. J.,** and Sayers, T. J.: TNF-related apoptosis-inducing ligand (TRAIL/Apo2L) as a therapeutic in cancer and autoimmune disease. Immunol. Cell. Biol. 84:87-98, 2006 **[100].**

180. Kjer-Nielson, L., Borg, N. A., Pellicci, D. G., Beddoe, T., Kostenko, L., Clements, C. S., Williamson, N., **Smyth, M. J.,** Besra, G. D., Reid, H. H., Bharadwaj, M., Godfrey, D. I., Rossjohn, J., and McCluskey, J.: A structural basis for selection and cross-species reactivity of the semi-invariant NKT cell receptor in CD1d-mediated antigen recognition. J. Exp. Med 203:661-673, 2006 **[97]**.

181. Berzins, S. P., McNab, F., **Smyth, M. J.,** and Godfrey, D. I.: Long-term retention of mature NK1.1^{+} NKT cells in the thymus. J. Immunol. 176:4059-4065, 2006 **[77].**

182. Reading, P. C., Whitney, P. G., Barr, D. P., **Smyth, M. J.,** and Brooks, A. G.: NK cells contribute to the early clearance of HSV-1 from the lung but cannot control replication in the central nervous system after intranasal infection. Eur. J. Immunol. 36:897-905, 2006 **[40].**

183. Uldrich, A., Berzins, S. P., Malin, M. A., Bouillet, P., Strasser, A., **Smyth, M. J.,** Boyd, R. L., and D. L. Godfrey, D. I.: Antigen challenge inhibits thymic emigration. J. Immunol. 176:4553-4361, 2006 **[16].**

184. **Smyth, M. J.,** Hayakawa, Y., Cretney, E., Zerafa, N., Sivakumar, P., Yagita, H., and Takeda, K.: IL-21 enhances tumor-specific CTL induction by anti-DR5 antibody therapy. J. Immunol. 176:6347-6355, 2006 **[43].**

185. Uno, T., Takeda, K., Kojima, Y., Yoshizawa, H., Akiba, H., Rolink, A., Mittler, R. S., Gejyo, F., Okumura, K., Yagita, H., and **Smyth, M. J.:** Eradication of established tumors by a rational antibody-based therapy that combines tumor cell apoptosis and T cell activation. Nature Medicine 12:693-698, 2006 **[211].**

186. **Smyth, M. J.**: Targeted therapy - uncovering a fast track to adaptive immunity. New Eng. J. Med. 354:2280-2282, 2006 **[19].**

187. Abdool, K., Cretney, Brooks, A. D., E., Kelly, J. M., Swann, J., Shanker, A., Bere, E. W. Jnr., Yokoyama, W. M., Ortaldo, J. R., **Smyth, M. J.**, and Sayers, T. J.: NK cells use NKG2D to recognize a mouse renal cancer (Renca) yet Require intercellular adhesion molecule-1 expression on the tumor cells for optimal perforin-dependent effector function. J. Immunol. 177:2575-2583, 2006 **[20].**

188. van Dommelen, S. L. H., Sumaria, N., Schreiber, R. D., Scalzo, A. A., **Smyth, M. J.,** and Degli-Esposti, M. A.: Perforin and granzymes play distinct roles in defensive immunity versus immunopathology. Immunity. 25:835-848, 2006 **[111].**

189. Teng, M. W. L., Kershaw, M. H., Jackson, J. T., **Smyth, M. J.,** and Darcy, P. K.: Adoptive transfer of chimeric-FceRI receptor gene-modified human T cells for cancer immunotherapy. Human Gene Therapy 17:1134-1143, 2006 **[18].**

190. Coquet, J. C., Kyparissoudis, K., Pellicci, D. G., Berzins, S. P., **Smyth, M. J.,** and Godfrey, D. I.: IL-21 is produced by NKT cells and modulates NKT cell activation and cytokine production. J. Immunol. 178:2827-2834, 2007 **[312].**

191. Simson, L., Ellyard, J. I., Dent, L. A., Matthaei, K. I., Rothenberg, M. E., Foster, P. S., **Smyth, M. J.,** and Parish, C. R.: Regulation of methylcholanthrene-induced carcinogenesis by interluekin-5 and CCL11: a potential role for eosinophils in tumor immune surveillance. J. Immunol. CUTTING EDGE 178:4222-4229, 2007 **[106].**

192. Huntington, N. D., Tabarias, H., Fairfax, K., Brady, J. Hayakawa, Y., Degli-Esposti, M. A., **Smyth, M. J.,** Tarlinton, D. M., and Nutt, S. L.: Natural killer cell maturation and peripheral homeostasis is associated with KLRG1 up-regulation. J. Immunol. 178:4764-4670, 2007 **[135].**

193. Murphy, A., Westwood, J.A., Brown, L. E., Teng, M. W. L., Moeller, M., Xu, Y., **Smyth, M. J.,** Hwu, P., Darcy, P. K., and Kershaw, M. H.: Antitumor activity of dual-specific T cells and influenza virus. Cancer Gene Therapy 14:499-508, 2007 **[20].**

194. Lindemann, R. K., Newbold, A., Whitecross, K. F., Cluse, L. A., Frew, A. J., Ellis, L., Williams, S., Wiegmans, A. P., Dear, A. E., Scott, C. L., Pelligrini, M., Wei, A., Richon, V. M., Marks, P. A., Lowe, S. W., **Smyth, M. J.,** and Johnstone, R. W.: Analysis of the apoptotic and therapeutic activities of deacetylase inhibitors using a mouse model of B cell lymphoma. Proc.Natl. Acad. Sci. USA 104:8071-8076, 2007 **[167].** [This paper was featured in Nature Reviews Cancer 7:403, 2007].

195. Street, S. E. A., Zerafa, N., Iezzi, M., Westwood, J. A., Stagg, J., Musiani, P., and **Smyth, M. J.:** Host perforin reduces tumor number but does not increase survival in oncogene-driven mammary adenocarcinoma. Cancer Research 67:5454-5460, 2007 **[37].**

196. Swann, J. B., Hayakawa, Y., Zerafa, N., Sheehan, K. C. F., Scott, B., Schreiber, R. D., Hertzog, P., and **Smyth, M. J.:** Type I interferon response controls NK cell homeostasis, activation and anti-tumor function. J. Immunol. 178:7540-7549, 2007 **[135].**

197. Huntington, N. D., Puthalakath, H., Gunn, P., Naik, E., Michalak, E. M., **Smyth, M. J**., Tabarias, H., Degli-Esposti, M. A., Dewson, G., Willis, S., Motoyama, N., Huang, D. CS., Nutt, S. L., Tarlinton, D. M., and Strasser, A.: Interleukin 15-mediated survival of natural killer cells is determined by interactions among Bim, Noxa and Mcl-1. Nature Immunology 8:856-863, 2007 **[127].**

198. Groom, J., Fletcher, C.A., Walters, S., Grey, S.T., Watt, S.V., Sweet, M. J., **Smyth, M.J.**, Mackay, C.J., and Mackay, F.: BAFF and MyD88 signals promote a lupus-like disease, independent of T cells. J. Exp. Med. 204:1959-1971, 2007 **[271].**

199. Teng, M. W. L., Westwood, J. A., Darcy, P. K., Sharkey, J., Tsuji, M., Franck, R. W., Porcelli, S. A., Besra, G. S., Takeda, K., Yagita, H., Kershaw, M. H., and **Smyth, M. J.:** Combined NKT cell-based immunotherapy eradicates established tumors in mice. Cancer Res. 67:7495-7504, 2007 **[54].**

200. Wykes, M. N., Liu, X. Q., Beattie, L., Stanisic, D. I., Stacey, K. J., **Smyth, M. J.,** Thomas, R., and Good, M. F.: Plasmodium strain determines dendritic cell function essential for survival following infection. PLOS pathogen 3:904-912, 2007 **[69].**

201. Weckmann, M., Kopp, M. V., Simpson, J. L., **Smyth, M. J.,** Yagita, H., Matthaei, K. I., Gibson, P. G., Foster, P. S., and Mattes, J.: Identification of a critical link between TRAIL and Th2 cells for the expression of allergic lung disease. Nature Medicine 13:1308-1315, 2007 **[89].**

202. Mileshkin, L., Honemann, D., Gambell, P., Trivett, M., Hayakawa, Y., **Smyth, M. J.,** Beshay, V., Ritchie, D., Simmons, P., Milner, A. D., Zeldis, J. B., and Prince, H. M.: Patients with multiple myeloma treated with thalidomide: evaluation of clinical parameters, cytokines, angiogenic markers, mast cells, and marrow $CD57^+$ cytotoxic T cells as predictors of outcome. Haematologica 92:1075-1082, 2007 **[39].**

203. Caminschi, I., Ahmet, F., Heger, K., Brady, J., Nutt, S. L., Vremec, D., Pietersz, S., Lahoud, M. H., Schofield, L., Hansen, D., O'Keeffe, M., **Smyth, M. J.,** Bedoui, S., Davey, G. M., Villandangos, J. A., Heath, W. R., and Shortman, K.: Putative IKDCs are functionally and developmentally similar to natural killer cells, but not to dendritic cells. J. Exp. Med. 204:2579-2590, 2007 **[115].**

204. McNab, F. W., Coquet, J. M., Pellicci, D. G., Kyparissoudis, K., Field, K., Besra, G., **Smyth, M. J.,** Godfrey, D. I., and Berzins, S. P.: Peripheral NK1.1- NKT cells are mature and functionally distinct from their thymic counterparts. J. Immunol. 179:6630-6637, 2007 **[60].**

205. Koebel, C. M., Vermi, W., Swann, J. B., Zerafa, N., Rodig, S. J., Old, L. J., **Smyth, M. J.*,** and Schreiber, R. D.*: Adaptive immunity controls occult tumors during the equilibrium stage of cancer immunoediting. Nature 450:903-907, 2007 **[807]. * equal senior author.**

206. Moeller, M., Kershaw, M. H., Cameron, R., Westwood, J. A., Trapani, J. A., **Smyth, M. J.,** and Darcy, P. K.: Sustained antigen-specific anti-tumor recall response mediated by gene-modified $CD4^+$ T helper 1 cells and $CD8^+$ T cells. Cancer Res. 67:11428-11437, 2007 **[34].**

207. Russell, S. M., Ludford-Menting, M. J., Oliaro, J., Sacirbegovic, F., Cheah, E. T. Y., Pedersen, N., Thomas, S., Pasam, A., Iazzolino, R., Dow, L. E., Waterhouse, N. E., Murphy, A., Ellis, S., **Smyth, M. J.,** Kershaw, M. H., Darcy, P. K., and Humbert, P. O.: T cell shape and function is orchestrated by a network of polarity proteins. J. Invest. Dermatology 127:2683, 2007 **[n/a].**

208. Hayakawa, Y., Watt, S. V., Takeda, K., and **Smyth, M. J.:** Distinct receptor repertoire formation in mouse NK cell subsets regulated by MHC class I expression. J. Leuk. Biol. 83:106-111, 2008 **[17].**

209. Swann, J. B., Vesely. M., Silva, A., Sharkey, J., Akira, S., Schreiber, R. D., and **Smyth, M. J.:** Demonstration of inflammation-induced cancer and cancer immunoediting during primary tumorigenesis. Proc. Natl. Acad. Sci. USA 105:652-656, 2008 **[229].**

210. Cretney, E., Uldrich, A. P., Berzins, S. P., Godfrey, D. I., and **Smyth, M. J.:** No requirement for TRAIL in intrathymic negative selection. Int. Immunol. 20:267-276, 2008 **[9].**

211. Shanker, A., Brooks, A. D., Tristan, C., Wine, J., Elliot, P. J., Yagita, H., Takeda, K., **Smyth, M. J.,** Murphy, W. J., and Sayers, T. J.: Treating metastatic solid tumors with bortezomib and a tumor necrosis factor related apoptosis-inducing ligand receptor agonist antibody. J.Natl. Cancer Inst. 100:649-662, 2008 **[69].**

212. **Smyth, M. J.,** Teng, M. W. L., Sharkey, J., Westwood, J. A., Haynes, N. M., Yagita, H., Takeda, K., Sivakumar, P., and Kershaw, M. H.: IL-21 enhances antibody-mediated tumor rejection. Cancer Res. 68:3019-3025, 2008 **[31].**

213. Silva, A., Brooks, A. G., Andrews, D. M., **Smyth, M. J.,** and Hayakawa, Y.: Application of CD27 as a marker for distinguishing human NK cell subsets. Int. Immunol. 20:625-630, 2008 **[62].**

214. Coquet, J. M., Chakravarti, S., **Smyth, M. J.*,** and Godfrey, D. I.*: IL-21 is not essential for Th17 differentiation or experimental autoimmune encephalomyelitis. J. Immunol. 180:7097-7101, 2008 **[119]. * equal senior author.**

215. Westwood, J. A., Murray, W. K., Trivett, M., Shin, A., Neeson, P., MacGregor, D. P., Haynes, N. M., Trapani, J. A., Mayura-Guru, P., Fox, S., Peinert, S., Honemann, D., Prince, H. M., Ritchie, D., Scott, A. M., Smyth, F. E., **Smyth, M. J.,** Darcy, P. K., and Kershaw, M. H.: Absence of retroviral vector-mediated transformation of gene-modified T cells after long-term engraftment in mice. Gene Therapy 15:1056-1066, 2008 **[19].**

216. Stanley, A. C., Zhou, Y., Amante, F. H., Randall, L. M., Haque, A., Pellicci, D. G., Hill, G. R., **Smyth, M. J.,** Godfrey, D. I., and Engwerda, C. R.: Activation of invariant NKT cells exacerbates experimental visceral leishmaniasis. PLoS Pathogens. 4:e1000028, 2008 **[43].**

217. Andrews, D. M., **Smyth, M. J.,** and Degli-Esposti, M. D.E.: The early kinetics of cytomegalovirus-specific CD8+ T cell responses are not affected by antigen load or the absence of perforin or IFN-γ. J. Virol. 82:4931-4937, 2008 **[22].**

218. Takeda, K., Kojima, Y., Ikejima, K., Harada, K., Yamashina, S., Okumura, K., Aoyama, T., Frese, S., Sueyoshi, N., Haynes, N., Cretney, E., Yagita, H., Sato, N., Nakanuma, Y., **Smyth, M. J.*,** and

Okumura, K.*****: Pathogenic contribution of death receptor 5 mediated-apoptosis to cholestatic liver disease. Proc. Natl. Acad. Sci. USA 105:10895-10900, 2008 **[74]. * equal senior author.**

219. Coquet, J. M., Chakravarti, S., Kyparissoudis, K., McNab, F., Pitt, L. A., McKenzie, B. S., Berzins, S. P., **Smyth, M. J.,** and Godfrey, D. I.: Diverse cytokine production by NKT cell subsets and identification of an IL-17 producing $CD4^{-}NK1.1^{-}$ NKT cell population. Proc. Natl. Acad. Sci. USA 105:11287-11292, 2008 **[261].**

220. Frew, A.J., Lindemann, R. K., Martin, B. P., Clarke, C. J. P., Sharkey, J., Anthony, D. A., Banks, K. M., Haynes, N. M., Gangatirkar, P., Stanley, K., Bolden, J. E., Takeda, K., Yagita, H., Secrist, J. P., **Smyth, M. J.*,** and Johnstone, R. W.***:** Combination therapy of established cancer using a histone deacetylase inhibitor and a TRAIL receptor agonist. Proc. Natl. Acad. Sci. USA 105:11317-11322, 2008 **[119]. *equal senior author.**

221. Watt, S. V., Andrews, D. M., Takeda, K., **Smyth, M. J.,** and Hayakawa, Y.: IFN-γ-dependent recruitment of mature $CD27^{hi}$ NK cells to lymph nodes primed by dendritic cells. J. Immunol. 181:5323-5330, 2008 **[42].**

222. Pegram, H., Jackson, J. T., **Smyth, M. J.,** Kershaw, M. H., and Darcy, P. K.: Adoptive transfer of gene-modified primary NK cells can specifically inhibit lymphoma progression in vivo. J. Immunol. 181:3449-3455, 2008 **[71].**

223. Kartsogiannis, V., Sims, N. A., Quinn, J. M. W., Ly, C., Cipetic, M., Poulton, I. J., Walker, E. C., Saleh, H., McGregor, N. E., Wallace, M. E., **Smyth, M. J.,** Martin, T. J., Zhou, H., Ng, K. W., Gillespie, M. T.: Osteoclast inhibitory lectin (OCIL), an immune cell product that is required for normal bone physiology in vivo. J. Biol. Chem. 283:30850-30860, 2008 **[21].**

224. Stagg, J., Sharkey, J., Pommey, S., Young, R., Takeda, K., Yagita, H., Johnstone, R. W., and **Smyth, M. J.:** In vivo anti-tumor synergy between monoclonal antibodies targeted to TRAIL receptor and ErbB-2. Proc. Natl. Acad. Sci. USA 105;16254-16259, 2008 **[40].**

225. Gilfillan, S.*, Chan, C. J.*, Cella, M., Haynes, N. M., Rapaport, A. S., Boles, K., Andrews, D. M., **Smyth, M. J.*,** and Colonna, M.*: DNAM-1 promotes activation of cytotoxic lymphocytes by non-professional antigen presenting cells and tumors. J. Exp. Med. 205:2965-2973, 2008 **[140]. *equal senior author.**

226. Lena, G., Trapani, J. A., Sutton, V. R., Ciccone, A., Browne, K. A., **Smyth, M. J.,** Denny, W. A., and Spicer, J. A.: Dihydrofuro[3,4-c] pyridinones as inhibitors of the cytolytic effects of the pore-forming glycoprotein perforin. J. Med. Chem. 51:7614-7624, 2008 **[22].**

227. Wiede, F., Roomberg, A., Cretney, E., Lechner, A., Fromm., A., Wren, L., **Smyth, M. J.**, and Korner, H.: Age-dependent, polyclonal hyperactivation of T cells is reduced in TNF-negative *gld/gld* mice. J. Leuk. Biol. 85:108-116, 2009 **[7].**

228. Kaufmann, T., Jost, P. J., Pelligrini, M., Puthalakath, H., Gugasyan, R., Gerondakis, S., Cretney, E., **Smyth, M. J**., Silke, J., Hakem, R., Bouillet, P., Mak, T. W., Dixit, V., and Strasser, A.: Fatal hepatitis mediated by TNFα requires capsase-8 and involves the BH3-only proteins Bid and Bim. Immunity 30:56-66, 2009 **[95].**

229. Kawamura, T., Takeda, K., Kaneda, H., Matsumoto, H., Hayakawa, Y., Raulet, D. H., Ikarashi, Y., Kronenberg, M., Yagita, H., Kinoshita, K., Abo, T., Okumura, K., and **Smyth, M. J.:** NKG2A inhibits iNKT cell activation in hepatic injury. J. Immunol. 182:250-258, 2009 **[25].**

230. Bolitho, P., Street, S. E. A., Westwood, J. A., Edelmann, W., MacGregor, D., Waring, P., Murray, W. K., Trapani, J. A., Johnstone, R. W., Godfrey, D. I., and **Smyth, M. J.:** Perforin-mediated suppression of B cell lymphoma. Proc. Natl. Acad. Sci. USA 106:2723-2728, 2009 **[25].**

231. Teng, M. W. L., Yue, S., Sharkey, J., Exley, M. A., and **Smyth, M. J.:** CD1d activation and blockade: a new anti-tumor strategy. J. Immunol. 182:3366-3371, 2009 **[23].**

232. Westwood, J. A., Murray, W. K., Trivett, M., Haynes, N. M., Solomon, B., Mileshkin, L., Ball, D., Michael, M., Burman, A., Mayura-Guru, P., Trapani, J. A., Peinhart, S., Honemann, D., Prince, H. M., Scott, A. M., **Smyth, M. J.,** Darcy, P. K., and Kershaw, M. H.: The Lewis-Y carbohydrate antigen is expressed by many human tumors and can serve as a target for genetically redirected T cells despite the presence of soluble antigen in serum. J. Immunotherapy 32:292-301, 2009 **[26].**

233. Broomfield, S. A., van der Most, R. G., Prosser, A., Mahendran, S., **Smyth, M. J.,** Tovey, M. G., Robinson, B. W. S., and Currie, A. J.: Locally administered toll-like receptor-7 agonists drive systemic anti-tumor immune responses that are enhanced by anti-CD40 immunotherapy. J. Immunol. 182:5217-5224, 2009 **[69].**

234. Morris, E. S., MacDonald, K. P. A., Kuns, R. D., Morris, H. M., Banovic, T., Don, A. L. J., Rowe, V., Wilson, Y., Reffelt, N., Engwerda, C. R., Burman, A. C., Markey, K. A., Godfrey, D. I, **Smyth, M. J.,** and Hill, G. R.: Induction of iNKT cell-dependent graft versus host disease by administration of G-CSF after bone marrow transplantation. Nature Medicine 15:436-441, 2009 **[43].**

235. Swann, J. B., Uldrich, A. P., van Dommelen, S., Sharkey, J., Murray, W. K., Godfrey, D. I., and **Smyth, M. J.:** Type I NKT cells suppress lymphomas and sarcomas caused by p53 loss in mice. BLOOD 113:6382-6385, 2009 **[67].**

236. Kuns, R. D., Morris, E. S., MacDonald, K. P. A., Markey, K. A., Morris, H. M., Raffelt, N. C., Banovic, T., Don, A. L. J., Rowe, V., Burman, A. C., Clouston, A. D., Farah, C., Besra, G. S., Illarionov, P. A., **Smyth, M. J.,** Porcelli, S. A., and Hill, G. R.: Invariant NKT-NK cell interactions dictate transplant outcome following galactosylceramide administration. BLOOD 113:5999-6010, 2009 **[27].**

237. Teng, M. W. L., Sharkey, J., McLaughlin, N., Exley, M. A., and **Smyth, M. J.:** CD1d-based combination therapy eradicates established tumors in mice. J. Immunol. 183:1911-1920, 2009 **[22].**

238. Pellicci, D. G., Patel, O., Kjer-Nielsen, L., Pang, S-S., Sullivan, L. C., Kyparissoudis, K., Brooks, A. G., Reid, H. H., Gras, S., Lucet, I., Koh, R., **Smyth, M. J.,** Mallevaey, T., Matsuda, J., Gapin, L., McCluskey, J., Godfrey, D. I., and Rossjohn, J.: Differential recognition of CD1d-α-galactosylceramide by the Vβ8.2 and Vβ7 semi-invariant NKT T-cell receptors. Immunity 31:47-59, 2009 **[157].**

239. Sumaria, N., van Dommelen, S. H. L., Andoniou, C. E., **Smyth, M. J.,** Scalzo, A. A., and Degli-Esposti, M. A.: The roles of interferon gamma and perforin in anti-viral immunity in mice that differ in their genetically determined NK cell anti-viral activity. Immunol. Cell Biol. 87:559-566, 2009 **[39].**

240. Starr, R., Fuchsberger, M., Lau, L. S., Uldrich, A. P., Goradia, A., Wilson, T. A., Verhagen, A. M., Alexander, W. S., and **Smyth, M. J.:** SOCS1 binding to tyrosine-441 of IFNGR1 contributes to the attenuation of IFNγ signaling in vivo. J. Immunol. 183:4537-4544, 2009 **[20].**

241. O'Reilly, L. A., Tai, L., Lee, L., Kruse. E. A., Grabow, S., Fairlie, W. D., Haynes, N. M., Tarlinton, D. M., Zhang, J-G., Belz, G. T., **Smyth, M. J.,** Bouillet, P., Robb, L., and Strasser, A.: Membrane-bound, but not secreted Fas ligand is essential for Fas-induced apoptosis and prevention of autoimmunity and cancer. Nature 461:659-663, 2009 **[228].**

242. Ghringhelli, F., Apetoh, L., Tesniere, A., Aymeric, L., Ortiz, C., Vermaelen, K., Panaretakis, T., Mignot, G., Ullrich, E., Perfettini, J.L., Schlemmer, F., Tasdemir, E., Uhl, M., Genin, P., Civas, A., Ryffel, B., Kanellopoulos, J., Tschopp, J., Andre, F., Lidereau, R., McLaughlin, N. M., Haynes, N. M., **Smyth, M. J.*,** Kroemer, G.*, and Zitvogel, L.*: Activation of the NALP3 inflammasome in dendritic cells induces IL-1β-dependent adaptive immunity against tumors. Nature Medicine 15:1170-1178 2009 **[724]**. * equal senior authors.

243. van der Most, R. G., Currie, A. J., Cleaver, A. L., Salmons, J., Nowak, A. K., Mahendran, S., Larma, I., Prosser, A., Robinson, B. W. S., **Smyth, M. J.,** Scalzo, A. A., Degli-Esposti, M., and Lake, R. A.: Cyclophosphamide chemotherapy sensitizes tumor cells to TRAIL-dependent CD8 T cell-mediated immune attack resulting in suppression of tumor growth. PLOS one. 4:e6982, 2009 **[62].**

244. Sondergard, H., Coquet, J. M., Uldrich, A., McLaughlin, N., Godfrey, D. I., Sivakumar, P. V., Skak, K., and **Smyth, M. J.:** Endogenous IL-21 restricts CD8+ T cell expansion and is not required for tumor immunity. J. Immunol. 183:7326-7336, 2009 **[20].**

245. Westwood, J. A., Haynes, N. M., Sharkey, J., McLaughlin, N., Murray, W. K., Pegram, H. J., Schwendener, R. A., **Smyth, M. J.,** Darcy, P. K., and Kershaw, M. H.: A combination of toll-like receptor triggering and T cell co-stimulation eradicates established tumors in mice. Clin. Cancer Res. 15:7624-7633, 2009 **[21].**

246. Andrews, D. M. and **Smyth, M. J.:** A potential role for RAG-1 in NK cell development revealed through analysis of NK cells during ontogeny. Immunol. Cell Biol. 88:107-116, 2010 **[39].**

247. Chan, C. J.*, Andrews, D. M.*, McLaughlin, N. M., Yagita, H., Gilfillan, S., Colonna, M., and **Smyth, M. J.:** DNAM-1/CD155 interactions promote cytokine and NK cell-mediated suppression of poorly immunogenic melanoma metastases. J. Immunol. 184:902-911, 2010 **[82].**

248. Linteman, M. A., Beaton, L., Yu, D., Ramsical, R. R., Srivastava, M., Hogan, J. J., Verma, N. K., **Smyth, M. J.,** Rigby, R. J., and Vinuesa, C. G.: IL-21 acts directly on B cells to regulate Bcl-6 expression and germinal center responses. J. Exp. Med. 207:353-363, 2010 **[404].**

249. Stagg, J., Divisekera, U., McLaughlin, N., Sharkey, J., Pommey, S., Denoyer, D., Dwyer, K. M., and **Smyth, M. J.:** Anti-CD73 antibody therapy inhibits breast tumor growth and metastasis. Proc. Natl. Acad. Sci. USA 107:1547-1552, 2010 **[208].**

250. Zotos, D., Coquet, J. M., Zhang, Y., Light, A., D'Costa, K., Kallies, A., Corcoran, L. M., Godfrey, D. I., Toellner, K-M., **Smyth, M. J.,** Nutt, S. L., and Tarlinton, D. M.: IL-21 regulates germinal center B cell differentiation and proliferation through a B cell intrinsic mechanism. J. Exp. Med. 207:365-378, 2010 **[366].**

251. Ngiow, S-F., **Smyth, M. J.***, and Teng, M. W. L.*: Does IL-17 suppress tumor growth? BLOOD 115: 2554-2555, 2010 **[22].**

252. Teng, M. W. L., Swann, J. B., von Scheidt, B., Sharkey, J., Zerafa, N., McLaughlin, N., Yamaguchi, T., Sakaguchi, S., Darcy, P. K., and **Smyth, M. J.:** Multiple anti-tumor mechanisms downstream of prophylactic regulatory T cell depletion. Cancer Res. 70:2665-2674, 2010 **[56].**

253. Kastrukoff, L. F., Lau, A. S., Takei, F., **Smyth, M. J.,** Jones, C. M., Clarke, S. R. M., and Carbone, F. R.: Redundancy is an integral part of the immune systems restricting viral spread in the central nervous system and mediating viral clearance in C57BL/6 mice infected with HSV-1. Virol. 400:248-258, 2010 **[22].**

254. Takeda, K., Kojima, Y., Uno, T., Hayakawa, Y., Teng, M. W. L., Yoshizawa, H., Yagita, H., Gejyo, F., Okumura, K., and **Smyth, M. J.:** Combination therapy of established tumors by antibodies targeting immune activating and suppressing molecules. J. Immunol. 184:5493-5501, 2010 **[55].**

255. Andrews, D. M., Estcourt, M. J., Khong, A., Andoniou, C. E., Fleming, P., Voight, V., Tabarias, H., Allan, J. E., Hill, G. R., van de Most, R. G., Scalzo, A. A., **Smyth, M. J.,** and Degli-Esposti, M. A.: Innate immunity defines the capacity of anti-viral T cells to limit persistent infection. J. Exp. Med. 207:1333-1343, 2010 **[139].**

256. Teng, M. W. L., Andrews, D. M., McLaughlin, N., von Scheidt, B., Ngiow, S., Moller, A., Hill, G. R., Iwakura, Y., Oft, M., and **Smyth, M. J.:** IL-23 suppresses innate immune response independently of IL-17A during carcinogenesis and metastasis. Proc. Natl. Acad. Sci. USA 107:8328-8333, 2010 **[76].**

257. Peinert, S., Prince, H. M., Guru, P., Kershaw, M. H., **Smyth, M. J.,** Trapani, J. A., Gambell, P., Harrison, S., Scott, A. M., Smyth, F. E., Darcy, P. K., Tainton, K., Neeson, P., Ritchie, D. S., and Honemann, D.: Gene modified chimeric T cells produced under good manufacturing practice conditions as immunotherapy for Lewis Y antigen expressing hematological malignancies. Gene Therapy. 17:678-686, 2010 **[37].**

258. Haynes, N. M., Hawkins, E. D., Li, M., McLaughlin, N. M., Hammerling, G., Schwendener, R., Winoto, A., Wensky, A., Yagita, H., Takeda, K., Kershaw, M. H., Darcy, P. K., and **Smyth, M. J.:** CD11c+ dendritic cells and B cells contribute to the tumoricidal activity of anti-DR5 antibody therapy in established tumors. J. Immunol. 185:532-541, 2010 **[32].**

259. Oliaro, J., Van Ham, V., Sacirbegovic, F., Pasam, A., Bomzon, Z., Pham, K., Ludford-Menting, M., Waterhouse, N., Bots, M., Hawkins, E. D., Watt, S., Cluse, L., Clarke, C., Izon, D., Chang, J., Thompson, N., Gu, M., Johnstone, R. W., **Smyth, M. J.,** Humbert, P., Reiner, S., and Russell, S. M.: Asymmetric cell division of T cells upon antigen presentation utilizes multiple conserved mechanisms. J. Immunol. 185:367-375, 2010 **[69].**

260. Neeson, P., Shin, A., Tainton, K., Guru, P., Prince, H. M., Harrison, S., Peinert, S., **Smyth, M. J.,** Trapani, J. A., Kershaw, M. H., Darcy, P. K., and Ritchie, D.: Ex-vivo culture of chimeric antigen receptor T cells generates CD8+ T cells with effector and central memory-like phenotype. Gene Therapy 17:1105-1116, 2010 **[15].**

261. Westwood, J. A., Guru, P. Murray, W. K., Pegram, H. J., Amos, S. M., van Puyenbroek, C., Cameron, R., **Smyth, M. J.,** Xu, Y., Darcy, P. K., and Kershaw, M. H.: Anti-tumor activity of genetically redirected T cells against orthotopic kidney cancer in mice. Open Gene Ther. J. 3:1-7, 2010 **[2].**

262. Westwood, J. A., Darcy, P. K., Mayura-Guru, P., Sharkey, J., Pegram, H. J., Amos, S. M., **Smyth, M. J.,** and Kershaw, M. H.: Three agonist antibodies in combination with high-dose IL-2 eradicate orthotopic kidney cancer in mice. J. Trans. Med. 8:42, 2010 **[26].**

263. Hill, G. R., Olver, S., Kuns, R., Varelia, A., Raffelt, N. C., Don, A. L., Markey, K. A., Wilson, Y., **Smyth, M. J.,** Iwakura, Y., Tocker, J., Clouston, A. D., and MacDonald, K. P. A.: Stem cell mobilization with G-CSF induces Th-17 differentiation and promotes scleroderma. BLOOD 116: 819-828, 2010 **[73].**

264. Anthony, D. A., Andrews, D. M., Chow, M., Watt, S. V., House, C., Akira, S., Bird, P. I., Trapani, J. A., and **Smyth, M. J.:** A role for granzyme M in TLR4-driven inflammation and endotoxicosis. J. Immunol. 185:1794-1803, 2010 **[46].**

265. Williams, S. A., Harata-Lee, Y., Comerford, I., Anderson, R. L., **Smyth, M. J.,** and McColl, S. R.: Multiple functions of CXCL12 in a syngeneic model of breast cancer. Molecular Cancer 9:250, 2010 **[31].**

266. Teng, M. W. L., Ngiow, S. F., von Scheidt, B., McLaughlin, N., Sparwasser, T., and **Smyth, M. J.:** Conditional regulatory T cell depletion releases adaptive immunity preventing carcinogenesis and suppressing established tumor growth. Cancer Res. 70:7800-7809, 2010 **[81].**

267. Klages, K., Mayer, C. T., Lahl, K., Loddenlkemper, C. L., Teng, M. W. L., Ngiow, S. F., **Smyth, M. J.,** Hamann, A., Huehn, J., and Sparwasser, T.: Selective depletion of $FoxP3^+$ regulatory T cells improves effective therapeutic vaccination against established melanoma. Cancer Res. 70:7788-7799, 2010 **[134].**

268. Wang, L. X. J., Westwood, J. A., Moeller, M., Duong, C. P. M., Wei, W-Z., Malaterre, J., Trapani, J. A., Neeson, P., **Smyth, M. J.,** Kershaw, M. H., Darcy, P.K.: Tumor ablation by gene-modified T cells in the absence of autoimmunity. Cancer Res. 70:9591-9598, 2010 **[28].**

269. Wei, J., Waithman, J., Lata, R. Misfud, N. A., Cebon, J., Kay, T, **Smyth, M. J.,** Sadler, A. J., and Chen, W.: Influenza A infection enhances cross priming of CD8+ T cells to cell associated antigens in a TLR7- and type I IFN-dependent fashion. J. Immunol. 185:6013-6022, 2010 **[24].**

270. Brady, J., Carotta, S., Thong, R. P. L., Chan, C., Hayakawa, Y., **Smyth, M. J.,** and Nutt, S.L.: The interaction of multiple cytokines control NK cell maturation. J. Immunol. 185:6679-6688, 2010 **[65].**

271. Hsu, A., Quach, H., Tai, T., Prince, H. M., Harrison, S. J., Trapani, J. A., **Smyth M. J.,** Neeson, P., and Ritchie, D. S.: The immuno-stimulatory effect of lenalidomide on NK cell function is profoundly inhibited by concurrent dexamethasone therapy. BLOOD 117:1605-1613, 2011 **[93].**

272. Ma, Y., Aymeric, L., Locher, C., Delahaye, N. F., Mattarollo, S. R., Pereira, P., Boucontet, L., Viaud, S., Locher, C., Apetoh, L., Ghiringhelli, F., Casares, N., Lasarte, J. J., Matsuzaki, G., Ikuta, K., Ryffel, B., Benlagha, K., Tesniere, A., Andre, F., Mathieu, M-C., Dechanet, J., Chaput, N., **Smyth, M. J.,** Kroemer, G., and Zitvogel, L.: Contribution of IL-17 producing γδ T cells to the efficacy of anticancer chemotherapy. J. Exp. Med. 208:491-503, 2011 **[174].**

273. Andrews, D. M., Chow, M. T., Ma, Y., Cotterell, C. L., Watt, S. V., Anthony, D. A., Akira, S., Iwakura, Y., Trapani, J. A., Zitvogel, L., and **Smyth, M. J.**: Homeostatic defects in interleukin-18-deficient mice contribute to protection against the lethal effects of endotoxin. Immunol. Cell Biol. 89:502-510, 2011 **[15].**

274. Christiansen, D., Vaughan, H. A., Miland, J., Dodge, N., Mouhtouris, E., **Smyth, M. J.,** Godfrey, D. I., and Sandrin, M. S.: Antibody responses to glycolipid borne carbohydrates requires $CD4^+$ T cells but not CD1d or NKT cells. Immunol. Cell. Biol. 89:502-510, 2011 **[9].**

275. Kallies, A., Carotta, S., Huntington, N. D., Bernard, N. J., Tarlinton, D. M., **Smyth, M. J.,** and Nutt, S. L.: A role for BLIMP in the transcriptional network controlling NK cell maturation. BLOOD 117:1869-1879, 2011 **[77].**

276. Christiansen, A. J., West, A. C., Banks, K.-M., Haynes, N. M., Teng, M. W., **Smyth, M. J.*,** and Johnstone, R. W.* Eradication of solid tumors using histone deacetylase inhibitors with immune-stimulating antibodies. Proc. Natl. Acad. Sci. USA 108:4141-4146, 2011 **[38]. *equal senior author.**

277. Martin, B. P., Frew, A. J., Bots, M., Fox, S., Long, F., Takeda, K., Yagita, H., Atadja, P., **Smyth, M. J.***, and Johnstone, R. W.*: Anti-tumor activities and on-target toxicities mediated by a TRAIL receptor agonist following cotreatment with panobinostat. Int. J. Cancer 128:2735-2747, 2011 **[11].**

278. Teng, M. W. L., Duret, H., Towne, J. E., and **Smyth, M. J.:** Anti-IL-23 monoclonal antibody synergizes in combination with targeted therapies or IL-2 to suppress tumor growth and metastases. Cancer Res. 71:2077-2086, 2011 **[32].**

279. Amos, S., Pegram, H., Westwood, J., John, L., Devaud, C., Clarke, C. J., Restifo, N., **Smyth, M. J.,** Darcy, P.K., and Kershaw, M. H.: Adoptive immunotherapy combined with intratumoral TLR agonist delivery eradicates established melanoma in mice. Cancer Immunol. Immunother. 60:671-683, 2011 **[40].**

280. Stagg, J., Diviskera, U., Duret, H., Spawasser, T., Teng, M. W. L., Darcy, P. K., and **Smyth, M. J.**: CD73-deficient mice have increased anti-tumor immunity and are resistant to experimental metastasis. Cancer Res. 71:2892-2900, 2011 **[138].**

281. Ngiow, S-F., von Scheidt, B., Akiba, H., Yagita, H. Teng, M. W. L., and **Smyth, M. J.:** Anti-TIM3 antibody promotes T cell IFN-γ-mediated anti-tumor immunity and suppresses established tumors. Cancer Res. 71:3540-3551, 2011 **[163].**

282. Stagg, J., Loi, S., Divisekera, U., Ngiow, S. F., Duret, H., Yagita, H., Teng, M. W. L., and **Smyth, M. J.:** Anti-erbB-2mAb therapy requires type I and II interferons and synergizes with anti-PD-1 or anti-CD137 mAb therapy. Proc. Natl. Acad. Sci. 108:7142-7147, 2011 **[159].**

283. Uldrich, A. P., Patel, O., Cameron, G., Pellicci, D. G., Day, E. B., Sullivan, L. C., Kyparissoudis, K., Kjer-Nielsen, L., Vivian, J. P., Brooks, A. G., Besra, G. S., Turner, S. J., Porcelli, S. A., McCluskey, J., **Smyth, M. J.***, Rossjohn, J.*, and Godfrey, D. I.*: Atypical T cell receptor usage defines a population of natural killer T cells with distinct glycolipid antigen recognition properties. Nature Immunology 12:616-623, 2011 **[67] *equal senior authors.**

284. Haque, A., Best, S. E., Unosson, K., Amante, F., de Labastida, F., Anstey, N. M., Karupiah, G., Heath, W. R., **Smyth, M. J.,** and Engwerda, C. R.: An inter-dependent relationship between parasite burden and CD8+ T cell-mediated pathology in the brain during experimental cerebral malaria. J. Immunol. 186:6148-6156, 2011**[81].**

285. Mattarollo, S. R., Loi, S., Duret, H., Ma, Y., Zitvogel, L., and **Smyth, M. J.:** Pivotal role of innate and adaptive immunity in anthracycline chemotherapy of established tumors. Cancer Res. 71:4809-4820, 2011 **[133].**

286. Takeda, K., Nakayama, M., Sakaki, M., Hayakawa, Y., Imawari, M., Ogasawara, K., Okumura, K., and **Smyth, M. J.**: IFNγ production by lung NK cells is critical for the natural resistance to pulmonary metastasis of B16 melanoma. J. Leukocyte Biol. 90:777-785, 2011 **[36].**

287. Hsu, A., Quach, H., Tsin, T., Prince, H. M., Harrison, S. J., Trapani, J. A., **Smyth, M. J.,** Ritchie, D. S., and Neeson, P.: Response. Dexamethasone dose alters expression of NK activating receptors in vivo. BLOOD 118:6466-6468, 2011 **[3].**

288. West, A. C., Christiansen, A. J., **Smyth, M. J.,** and Johnstone, R. W.: The combination of histone deacetylase inhibitors with immune-stimulating antibodies has potent anti-cancer effects. Oncoimmunology 1:377-379, 2012 **[3].**

289. Matsushita, H., Vesely, M. D., Koboldt, D. C., Rickert, C. G., Uppaluri, R., Magrini, V., Arthur, C., White, J. M., Chen, Y. S., Shea, L. K., Hundal, J., Wendl, M. C., Demeter, R., Wylie, T., Allison, J. P., **Smyth, M. J.,** Old, L. J., Mardis, E., and Schreiber, R. D.: Tumour exome analysis reveals a mechanistic basis of cancer immunoediting. Nature 482:400-404, 2012 **[372].**

290. Li, M., Knight, D., **Smyth, M. J.,** and Stewart, T. J.: Sensitivity of a novel model of mammary cancer stem cell-like cells to TNF-related death pathways. Cancer Immunol. Immunother. 61:1255-1268, 2012 **[15].**

291. John, L. B., Howland, L. J., Stewart, T. J., Duong, C. M., Devaud, C., Westwood, J. A., Zheng Guo, S., Bartlett, D. L., **Smyth, M. J.,** Kershaw, M. H., and Darcy, P. K.: Oncolytic virus and anti-4-1BB combination therapy elicits strong anti-tumor immunity against established cancer. Cancer Res. 72:1651-1660, 2012 **[52].**

292. Paget, C., Chow, M. T., Duret, H., Mattarollo, S. R., and **Smyth, M. J.**: Role of gamma/delta T cells in alpha-galactosylceramide-mediated immunity. J. Immunol. 188:3928-3939, 2012 **[30].**

293. Stagg, J., Beavis, P. A., Divisekera, U., Darcy, P. K., and **Smyth, M. J.:** CD73-deficient mice are resistant to de novo tumorigenesis. Cancer Res. 72:2190-2196, 2012 **[80].**

294. Verbrugge, I., Hagekyriakou, J., Sharp, L. L., Galli, M., West, A., McLaughlin, N. M., Duret, H., Yagita, H., Johnstone, R. W.*, **Smyth, M. J.*,** and Haynes, N. M.*: Radiotherapy increases the permissiveness of established mammary tumors to rejection by immunomodulatory antibodies. Cancer Res. 72:3163-3174 2012 **[109].**

295. Bidwell, B. N., Slaney, C. Y., Withana, N. P., Forster, S., Cao, Y., Mikeska, T., Loi, S., Andrews, D., Mangan, N. E., Samarajiwa, S.A., de Weerd, N.A., Argani, P., Möller, A., **Smyth, M.J.,** Anderson, R.L., Hertzog, P. J., and Parker, B.S.: Silencing of Irf7 pathways in breast cancer cells promotes bone metastasis through immune escape mechanisms. Nature Medicine 19:1224-1231, 2012 **[109].**

296. Sceneay, J., Chow, M. T., Chen, A., Halse, H. M., Wong, C. S. F., Andrews, D. M., Bowtell, D. D., **Smyth, M. J.*,** and Moller, A.*: Primary tumor hypoxia recruits bone marrow-derived CD11b+/Ly-6Cmed/Ly-6G+ and NK cells to the pre-metatstatic niche. Cancer Res. 72:3907-3911, 2012 **[94].**

297. Tu, E., Ang, D. K. Y., Bellingham, S. A., Hogan, T. V., Teng, M. W. L., **Smyth, M. J.,** Hill, A. F., and van Driel, I. R.: Both IFN-γ and IL-17 are required for the development of severe autoimmune gastritis. Eur. J. Immunol. 42:2574-2583, 2012 **[11].**

298. Teng, M. W. L., Vesely, M. D., Duret, H., McLaughlin, N., Towne, J. E., Schreiber, R. D., and **Smyth, M. J.:** Opposing roles for IL-23 and IL-12 in maintaining occult cancer in an equilibrium state. Cancer Res. 72:3987-3996, 2012 **[38].**

299. O'Sullivan, T., Saddawi-Konefka, R., Vermi, W., Koebel, C., Arthur, C., White, J. M., Uppaluri, R., Andrews, D. M., Ngiow, S. F., Teng, M. W. L., **Smyth, M. J.,** Schreiber, R. D., and Bui, J. D.: Cancer immunoediting by the innate immune system in the absence of adaptive immunity. J. Exp. Med. 209:1869-1882, 2012 **[105].**

300. Senovilla, L., Vitale, I., Martins, I., Tailler, M., Pailleret, C., Michaud, M., Galluzzi, L., Adjemian, S., Kepp, O., Niso-Santano, M., Shen, S., Mariño, G., Criollo, A., Job, B., Ladoire, S., Ghiringhelli, F., Sistigu, A., Yamazaki, T., Rello-Varona, S., Locher, C., Poirier-Colame, V., Talbot, M., Valent, A., Berardinelli, F., Antoccia, A., Ciccosanti, F., Fimia, G. M., Piacentini, M., Fueyo, A., Messina, N., Li, M., Chan, C. J., Lazar, V., López-Otín, C., **Smyth, M. J.,** Zitvogel, L., Castedo, M., and Kroemer, G.: An immunosurveillance mechanism controls cancer cell ploidy. Science 337:1678-1684, 2012 **[149].**

301. Paget, C., Duret, H., Ngiow, S-F., Kansara, M., Thomas, D., and **Smyth, M. J.:** Studying the role of the immune system on the antitumor effect of a Hedgehog inhibitor against murine osteosarcomas. Oncoimmunology 1:1313-1322, 2012 **[6].**

302. Chow, M. T., Tschopp, J., Moeller, A., and **Smyth, M. J.:** NLRP3 promotes inflammation-induced skin cancer but is dispensable for asbestos-induced mesothelioma. Immunology Cell Biology 90:983-986, 2012 **[28].**

303. Mattarollo, S. R., West, A. C., Steegh, K., Duret, H., Paget, C., Martin, B., Matthews, G. M., Shortt,

J., Chesi, M., Bergsagel, P. L., Bots, M., Zuber, J., Lowe, S. W., Johnstone, R. W., and **Smyth, M. J.**: NKT cell adjuvant-based tumor vaccine for treatment of myc oncogene-driven mouse B cell lymphoma. BLOOD 120:3019-3029, 2012 **[33].**

304. Chow, M. T., Sceneay, J., Paget, C., Wong, C. S. F., Duret, H., Tschopp, J., Moeller, A., and **Smyth, M. J.:** NLRP3 suppresses NK cell-mediated responses to carcinogen-induced tumors and metastases. Cancer Res. 72:5721-5732, 2012 **[38].**

305. Andrews, D. M., Sullivan, L. C., Baschuk, N., Chan, C. J., Berry, R., Cotterell, C. L., Lin, J., Halse, H., Watt, S. V., Poursine-Laurent, J., Wang, C-R., Scalzo, A. A., Yokoyama, W., Rossjohn, J., Brooks, A. G.*, and **Smyth, M. J.*:** Recognition of H2-M3 by Ly49A regulates mouse natural killer cell licensing and activation. Nature Immunology 13:1171-1177, 2012 **[30].**

306. Wall, M., Poortinga, G., Stanley, K. L., Lindemann, R. K., Bots, M., Chan, C. J., Bywater, M. J., Kinross, K., Astle, M. V., Waldeck, K., Hannan, K. M., Shortt, J., **Smyth, M. J.,** Lowe, S. W., Hannan, R. D., Pearson, R. B., Johnstone, R. W., and McArthur, G. A.: The mTORC1 inhibitor everolimus prevents and treats Eμ-myc lymphoma by restoring oncogene-induced senescence. Cancer Discovery 3:82-95, 2013 **[30].**

307. Mattarollo, S. R., Steegh, K., Li, M., Duret, H., Ngiow, S-F., and **Smyth, M. J.:** Transient Foxp3+ regulatory T cell depletion enhances therapeutic anti-cancer vaccination targeting the immune-stimulatory properties of NKT cells. Immunol. Cell. Biol. 91:105-114, 2013 **[29].**

308. Ma, Y., Adjemian, S., Mattarollo, S. R., Duret, H., Steegh, K., Yamazaki, T., Aymeric, L., Yang, H., Catani, J. P. P., Hannani, D., Martins, I., Schlemmer, F., Michaud, M., Kepp, O., Galluzzi, L., Tordjmann, T., Droin, N., Villeval, J-L., Krzysiek, R., Solary, E., Murphy, K. M., **Smyth, M. J.,** Zitvogel, L., and Kroemer, G.: Anticancer chemotherapy-induced intratumoral recruitment and differentiation of antigen presentating cells. Immunity 38:729-741, 2013 **[173].**

309. Knight, D. A.*, Ngiow, S. F.*, Li, M., Parmenter, T., Mok, S., Cass, A., Haynes, N. M., Kinross, K., Yagita, H., Koya, R. C., Graeber, T., Ribas, A., McArthur, G. A., and **Smyth, M. J.:** Host immunity contributes to the anti-melanoma activity of BRAF inhibitors. J. Clin. Invest. 123:1371-1381, 2013 **[118].** Highlighted in Breaking Advances, Cancer Res. 73:1647-1648, 2013.

310. Ngiow, S. F., von Scheidt, B., Moeller, A., **Smyth, M. J.*,** and Teng, M. W. L.*: The interaction between murine melanoma and the immune system reveals that prolonged responses predispose for autoimmunity. Oncoimmunology 2(2):e23036, 2013 **[6].**

311. Kupz, A., Scott, T. A., Belz, G. T., Andrews, D. M., Greyer, M., Lew, A. M., Brooks, A. G., **Smyth, M. J.,** Curtiss, R. III., Bedoui, S., and Strugnell, R. A.: Contribution of Thy1+ NK cells to protective IFN-γ-production during Salmonella Typhimurium infections. Proc. Natl. Acad. Sci. USA 110:2252-2257, 2013 **[23].**

312. Sakuishi, K., Ngiow, S-F., Sullivan, J. M., Teng, M. W. L., Kuchroo, V. K., **Smyth, M. J.**, and Anderson, A. C.: $Tim3^{+}FoxP3^{+}$ regulatory T cells are tissue-specific promoters of T cell dysfunction in cancer. Oncoimmunology 2:e23849, 2013 **[47].**

313. Koyama, M., Kuns, R. D., Olver, S. D., Lineburg, K. E., Lor, M., Teal, B. E., Raffelt, N. C., Leveque, L., Chan, C. J., Robb, R. J., Markey, K. A., Alexander, K. A., Varelias, A., Clouston, A. D., **Smyth, M. J.,** MacDonald, K. P., and Hill, G. R.: Promoting regulation via the inhibition of DNAM-1 after transplantation. BLOOD 121:3511-3520, 2013 **[15].**

314. Ma, Y., Yamazaki, T., Yang, H., Kepp, O., Galluzzi, L., Zitvogel, L., **Smyth, M. J.*,** and Kroemer, G.*: Tumor necrosis factor is dispensable for the success of immune-dependent anticancer chemotherapy. Oncoimmunology 2:e24786, 2013 **[19].**

315. Biroccio, A., Cherfils-Vicini, J., Pinte, S., Bauwens, S., Ye, J., Augereau, A., Jamet, K., Cervera, L., Mendez-Bermudez, A., Poncet, D., Simonet, T., Ye, J., Augereau, A., Poncet, D., Grataroli, R., T'kint de Rodenbeeke, C., D'Angelo, C., Scarsella, M., Cognet, C., Kuilman, T., Duret, H., Lépinasse, F., Marvel, J., Verhoeyen, E., Cosset, F-L., Peeper, D., **Smyth, M. J.**, Londoño-Vallejo, A., Picco, V., Pages, G., Scoazec, J-Y, Stoppacciaro, A., Leonetti, C., Vivier, E., and Gilson, E.: TRF2 inhibits a cell-extrinsic pathway through which natural killer cells eliminate cancer cells. Nature Cell Biology 15:818-828, 2013 **[29].**

316. Loi, S., Pommey, S., Haibe Kains, B., Beavis, P. A., Darcy, P. K., **Smyth, M. J.*,** and Stagg, J.*: CD73 promotes anthracycline resistance and poor prognosis in triple-negative breast cancer. Proc. Natl. Acad. Sci. USA 110:11091-11906, 2013 **[71].**

317. Li, M., Knight, D. A., Snyder, L. A., **Smyth, M. J.,** and Stewart, T. J.: A role for CCL2 in both tumor progression and immunosurveillance. Oncoimmunology Jul 1;2(7):e25474, 2013 **[28].**

318. John, L. B., Devaud, C., Duong, C. P. M., Yong, C. S., Beavis, P. A., Haynes, N. M., Chow, M. T., **Smyth, M. J.**, Kershaw, M. H., and Darcy, P. K.: Anti-PD-1 antibody therapy potently enhances the eradication of established tumors by gene-modified T cells. Clin. Cancer Res. 19:5636-5346, 2013 **[116].**

319. Beavis, P. A., Divisekera, U., Paget, C., Chow, M. T., John, L. B., Devaud, C., Dwyer, K. M., Stagg, J.*, **Smyth, M. J.*,** and Darcy, P. K.*: Blockade of A2A receptors potently suppresses the metastasis of $CD73^+$ tumors. Proc. Natl. Acad. Sci. 110:14711-14716, 2013 **[65].**

320. Ritchie, D. S., Neeson, P. J., Khot, A., Peinert, S., Tai, T., Chen, K., Tainton, K. M., Shin, M., Wall, D. M., Honemann, D., Gambell, P., Westerman, D. A., Haurat, J., Westwood, J. A., Scott, A. M., Kravets, L., Dickinson, M., Trapani, J. A., **Smyth, M. J.**, Darcy, P. K., Kershaw, M. H., and Prince, H. M.: Peristance and efficacy of second generation CAR-T cell against the LeY antigen in acute myeloid leukemia. Molecular Therapy 21:2122-2129, 2013 **[84].**

321. Messina, N. L., Banks, K. M., Vidacs, E., Martin B. P., Long, F., Christiansen, A. J., **Smyth, M. J.,** Clarke, C. J., and Johnstone, R. W.: Modulation of antitumour immune responses by intratumoural Stat1 expression. Immunol. Cell Biol. 91:556-567, 2013. **[4]**

322. Coquet J. M., Skak, K., Davis, I. D., **Smyth, M. J.,** and Godfrey, D. I.: IL-21 modulates activation of NKT cells in patients with stage IV malignant melanoma. Clinical and Translational Immunology 10:e6, 2013. **[5]**

323. Allard, B., Pommey, S., **Smyth, M. J.*,** and Stagg, J.*: Targeting CD73 enhances the anti-tumor activity of anti-PD-1 and anti-CTLA-4 mAbs. Clin. Cancer Res. 19:5626-5635, 2013 **[63].**

324. Kansara, M., Leong, H. S., Lin, D. M., Popkiss, S., Pang, P., Garsed, D. W., Walkley, C. R., Cullinane, C., Ellul, J., Haynes, N. M., Hicks, R., Kuijjer, M. L., Cleton-Jansen, A-M., Hinds, P. W., **Smyth, M. J.,** and Thomas, D. M.: Immune response to RB1-regulated senescence limits radiation induced osteosarcoma formation. J. Clin. Invest. 123:5351- 5360, 2013 **[18].**

325. Hannani, D., Locher, C., Yamazaki, T., Colin-Minard, V., Vetizou, M., Aymeric, L., Viaud, S., Sanchez, D., **Smyth, M. J.,** Tedder, T., Bruhns, P., Kroemer, G., and Zitvogel, L.: Contribution of humoral immune responses to the antitumor effects mediated by chemotherapy. Cell Death and Differentiation 21:50-58, 2014 **[14].**

326. Devaud, C., Westwood, J. A., John, L. B., Flynn, J. K., Paquet-Fifield, S., Duong, C. P. M., Yong, C. M. S., Pegram, H. J., Stacker, S. A., Achen, M. G., Stewart, T. J., Snyder, L. A., Teng, M. W. L., **Smyth, M. J.,** Darcy, P. K., Kershaw, M. H.: Tissues in different anatomical sites can sculpt and vary the tumor microenvironment to affect responses to therapy. Mol. Therapy 22:18-27, 2014 **[33].**

327. West, A., Mattarollo, S. R., Shortt, J., Cluse, L. A., Christiansen, A. J., **Smyth, M. J.*,** and Johnstone, R. W.*: An intact immune system is required for anti-cancer activities of histone deacetylase inhibitors. Cancer Res. 73:7265-7276, 2013 **[38].**

328. Ma, Y., Mattarollo, S. R., Adjemian, S., Yang, H., Aymeric, L., Hannani, D., Catani, J. P. C., Duret, H., Kepp, O., Galluzzi, L.**,** Zitvogel, L.*, **Smyth, M. J.*,** and Kroemer, G.*: CCL2/CCR2-dependent recruitment of functional antigen-presenting cells into tumors post-chemotherapy. Cancer Res. 74:436-445, 2014 **[43].**

329. Afshar-Sterle, S., Zotos, D., Bernard, N. J., Scherger, A. K., Rodling, L., Alsop, A., Walker, J., Masson, F., Belz, G. T., Corcoran, L., O'Reilly, L. A., Strasser, A., **Smyth, M. J.,** Johnstone, R. W., Tralinton, D., Nutt, S. L., and Kallies, A.: Fas ligand mediated immune surveillance by T cells is essential for the control of spontaneous B cell lymphoma. Nature Medicine 20:283-290, 2014 **[27].**

330. Seillet, C., Huntington, N. D., Gangatirkar, P., Axelsson, E., Minnich, M., Auer, H., Brady, H., Busslinger, M., **Smyth, M. J.,** Belz, G., and Carotta, S.: Differential requirement for NFIL3 during NK cell development. J. Immunol. 192:2667-2676, 2014 **[40].**

331. Bird, C., Christensen, M., Mangan, M., Prakash, M., Sedelies, K., **Smyth. M. J.,** Harper, I., Waterhouse, N., and Bird, P.: The granzyme B-serpin b9 axis controls the fate of lymphocytes after lysosomal stress. Cell Death and Differentiation 21:876-887, 2014. **[5]**

332. von Scheidt, B., Leung, P. S. K., Yong, M. C. R., Zhang, Y., Towne, J. E., **Smyth, M. J.,** and Teng, M. W. L.: Combined anti-CD40 and anti-IL-23 monoclonal antibody therapy effectively suppresses tumor growth and metastases. Cancer Research 74:2412-2421, 2014. **[14]**

333. Baschuk, N., Wang, N., Watt, S. V., Halse, H., House C., Bird, P. I., Strugnell, R., Trapani, J. A., **Smyth, M. J.*,** and Andrews, D. M.*: NK cell instrinsic regulation of MIP-1α by granzyme M. Cell Death and Disease 5, e1115, 2014. **[8]**

334. Ramsbottom, K. M., Hawkins, E. D., Shimoni, R., McGrath, M., Chan, C. J., Russell, S. M., **Smyth, M. J.**, and Oliaro, J.: DNAM-1 deficient CD8+ T cells display immunological synapse defects that impair anti-tumour immunity. J. Immunol. 192:553-557, 2014. **[16]**

335. Poon, I. K. H.*, Goodall, K. J.*, Phipps, S., Chow, J. D. Y., Pagler, E. B., Andrews, D. M., Conlan, C. L., Ryan, G. F., White, J. A., Wong, M. K. L., Horan, C., Matthei, K. I., **Smyth, M. J.,** and Hulett, M. D.: Mice deficient in heparanase exhibit impaired dendritic cell migration and reduced airway inflammation. Eur. J. Immunol. 44:1016-1030, 2014. **[6]**

336. Chan, C. J.*, Martinet, L.*, Gilfillan, S., Guimaraes, F. S-F., Chow, M. T., Town, L., Ritchie, D. S., Colonna, M., Andrews, D. M., and **Smyth, M. J.:** CD96 and CD226 receptors oppose one another in the regulation of natural killer cell functions. Nature Immunology 15:431-438, 2014 [**61].** Commentary in: Bernhardt, G. TACTILE becomes tangible: CD96 discloses its inhibitory pecularities. Nature Immunology. 15:406-408, 2014.

337. Macagno, M., Bandini, S., Stramucci, L., Quaglino, E., Conti, L., Balmas, E., **Smyth, M. J.,** Lollini, P. L., Musiani, P., Forni, G., Iezzi, M., and Cavallo, F.: Multiple roles of perforin in hampering ERBB2 (Her-2/neu) carcinogenesis in transgenic male mice. J. Immunol. 192:5434-5441, 2014. **[3]**

338. Loi, S., Michiels, S., Salgado, R., Sirtaine, N., Jose, V., Fumagalli, D., Kellokumpu-Lehtinen, P-L., Bono, P., Kataja, V., Desmedt, C., Piccart, M. J., Loibl, S., Denkert, C., **Smyth, M. J.,** Joensuu, H., Sotiriou, C.: Tumor infiltrating lymphocytes is prognostic and predictive for trastuzumab benefit in early breast cancer: results from the FinHER trial. Annals Oncology 25:1544-1550, 2014. **[185]**

339. Chow, M. T., Duret, H., Andrews, D. M., Faveeuw, C., Moller, A., **Smyth, M. J.*,** and Paget, C.*: Type I NKT cell-mediated TNF-α is a key positive regulator of NLRP3 inflammasome activity. Eur. J. Immunol. 44:2111-2120, 2014. **[2]**

340. Mittal, D., Young, A., Stannard, K., Yong, M., Teng, M. W. L., Allard, B., Stagg, J., and **Smyth, M. J.:** Anti-metastatic effects of blocking PD-1 and the adenosine A2A receptor. Cancer Res. 74:3652-3658, 2014. **[30]**

341. **Smyth, M. J.,** Yagita, H., and McArthur, G. A.: Combination of anti-CTLA-4 and anti-RANKL in metastatic melanoma. J. Clin. Oncol. (in press, Oct 13, pii: JCO.2013.51.3572, 2014). **[1]**

342. Harata-Lee, Y., Turvey, M. E., Brazzatti, J. A., Gregor, C. E., Brown, M. P., **Smyth, M. J.,** Comerford, I., and McColl, S. R.: The atypical chemokine receptor CCX-CKR regulates metastasis of mammary carcinoma via an effect on EMT. Immunol. Cell Biol. 92:815-824, 2014. **[6]**
ICB Publication of the Year 2014

343. Sathe, P., Delconte, R., Rankin, L., Glaser, S., Seillet, C., Mielke, L., Vilkstrom, I., Vandenberg, C. J., Vivier, E., Souza-Fonseca-Guimaraes, F. **Smyth, M. J.,** Nutt, S. L., Strasser, A., Belz, G. T., Carotta, S., and Huntington, N. D.: Mcl-1 is essential for innate lymphoid homeostasis. Nature Communications Aug 14, 5:4539, 2014. **[22]**

344. Sistigu, A.*, Yamazaki, T.*, Vacchelli, E.*, Chaba, K., Enot, D. P., Adam, J., Vitale, I., Goubar, A., Baracco, E. E., Remédios, C., Fend, L., Hannani, D., Aymeric, L., Ma, Y., Niso-Santano, M., Kepp, O., Schultze, J. L., Tüting, T., Belardelli, F., Bracci, L., La Sorsa, V., Ziccheddu, G., Sestili, P., Urbani, F., Delorenzi, M., Lacroix-Triki, M., Quidville, V., Conforti, R., Spano, J-P., Pusztai, L., Poirier-Colame, V., Delaloge, S., Penault-Llorca, F., Ladoire, S., Arnould, L., Cyrta, J., Dessoliers, M-C., Eggermont, A., Bianchi, M. E., Pittet, M., Engblom, C., Pfirschke, C., Préville, X., Uzè, G., Schreiber, R. D., Chow, M. T., **Smyth, M. J.,** Proietti, E., André, F., Kroemer, G., and Zitvogel, L.: Cancer cell autonomous contribution of type 1 interferon signaling to the efficacy of chemotherapy. Nature Medicine 20:1301-1309, 2014. **[97]**

345. Devaud, C., Westood, J. A., Teng, M. W. L., John, L. B., Yong, C. S. M., Duong, C. P. M., **Smyth, M. J.,** Darcy, P. K., and Kershaw, M. H.: Differential potency of regulatory T cell-mediated immunosuppression in kidney tumors compared to subcutaneous tumors. Oncoimmunology 3(11):e963395. **[2]**

346. Holmes, M. L., Huntington, N. D., Thong, R. P. L., Brady, J., Hayakawa, Y., Andoniou, C. E., Fleming, P., Shi, W., Smyth, G. K., Degli-Esposti, M. A., Belz, G. T., Kallies, A., Carotta, S., **Smyth, M. J.,** and Nutt, S. L.: Peripheral natural killer cell maturation depends upon the transcription factor Aiolos. EMBO J. 33:2721-2734, 2014. **[10]**

347. Schuster, I. S., Wikstrom, M. E., Brizard, G., Estcourt, M. J., Manzur, M., O'Reilly, L. A., **Smyth, M. J.,** Trapani, J. A., Hill, G. R., Andoniou, C. E., and Degli-Esposti, M. A.: TRAIL+ NK cells control CD4+ T cell responses during chronic viral infection to limit autoimmunity. Immunity 41:646-656, 2014. **[35]**

348. Li, Y., To, K., Kanellakis, P., Hosseini, H., Deswaerte, V., Tipping, P., **Smyth, M. J.,** Toh, B-H., Bobik, A., and Kyaw, T. S.: $CD4^+$ natural killer T cells potently augment aortic root atherosclerosis by perforin- and granzyme B-dependent cytotoxicity. Circulation Research 116:245-254, 2014. **[7]**

349. Ferrari de Andrade, L., Ngiow, S. F., Stannard. K., Rusakiewicz, S., Kalimutho, M., Khanna, K. K., Tey, S. K., Takeda, K., Zitvogel, L., Martinet, L., and **Smyth, M. J.:** Natural killer cells are essential for the ability of BRAF inhibitors to control $BRAF^{V600E}$ mutant metastatic melanoma. Cancer Res. 74:7298-7308, 2014. **[24]**

350. Hannani, D., Vétizou, M., Enot, D., Rusakiewicz, S., Chaput, N., Klatzmann, D., Desbois, M., Jacquelot, N., Vimond, N., Chouaib, S., Mateus, C., Garcia, K. C., Ring, A. M., Allison, J. P., Ribas, A., Wolchok, J. D., Yuan, J., Wong, P., Mackiewicz, A., Mackiewicz, J., Schadendorff, D., Jaeger, D., Korman, A. J., Bahjat, K., Maio, M., Calabro, L., Teng, M. W. L., **Smyth, M. J.,** Eggermont, A., Kroemer, G., Robert, C., Zitvogel, L.: Anticancer immunotherapy by CTLA4 blockade: obligatory contribution of IL-2 receptors and negative prognostic impact of soluble CD25. Cell Research 25:208-224, 2015. **[27]**

351. Paget, C., Chow, M. T., Gherardin, N., Beavis, P. A., Uldrich, A., Duret, H., Hassane, M., Guimaraes, F. S. F., Mogilenko, D. A., Staumont-Salle, D., Escalante, N. K., Hill, G. R., Neeson, P., Ritchie, D. S., Dombtowicz, D., Mallevaey, T., Tottein, F., Belz, G. T., Godfrey, D. I., and **Smyth, M. J.:** CD3(bright) signals on γδ T cells identify IL-17A-producing Vγ6Vδ1(+) T cells. Immunol. Cell Biol. 93:198-212, 2015. **[5]**

352. Guillerey, C.*, Ferrari de Andrade, L.*, Vuckovic, S., Miles, K., Ngiow, S-F., Yong, M. C. R., Teng, M. W. L., Colonna, M., Ritchie, D. S., Chesi, M., Bergsagel, P. L., Hill, G. R., **Smyth, M. J.*,** and Martinet, L.*: Immunosurveillance and therapy of multiple myeloma is CD226-dependent. J. Clin. Invest. 125:2077-2089, 2015 **[7].**

353. Guillerey, C., Chow, M. T., Miles, K., Olver, S., Sceneay, J., Takeda, K., Moller, A., and **Smyth, M. J.:** Toll-like receptor 3 regulates NK cell responses to cytokines and controls experimental metastasis. Oncoimmunology Apr 2;4(9):e1027468. 2015. **[1]**

354. Martinet, L., Ferrari de Andrade, L., Guillerey, C., Lee, J. S., Liu, J., Guimaraes, F. S-F., Hutchinson D. S., Kolesnik, T. B., Nicholson, S. E., Huntington, N. D., and **Smyth, M. J.:** DNAM-1 expression marks an alternative program of NK cell maturation. Cell Reports 11:85-97, 2015 **[13].**

355. Souza-Fonseca-Guimaraes, F., Young, A., Mittal, D., Martinet, L., Bruedigam, C., Takeda, K., Andoniou, C. E., Degli-Esposti, M., Hill, G. R., and **Smyth, M. J.:** NK cells require IL-28R for optimal in vivo activity. Proc. Natl. Acad. Sci. USA May 5;112(18):E2376-84. Epub 2015 Apr 21. **[7]**

356. Ullah, M. A., M., Revez, J. A., Loh, Z., Simpson, J., Zhang, V., Bain, L., Varelias, A., Rose-John, S., Blumenthal, A., **Smyth, M. J.,** Hill, G. R., Sukkar, M. B., Ferreira, M. A. R., and Phipps, S.: IL-6R blockade attenuates experimental allergic asthma associated with activation of the IL-6 trans-signalling pathway. J. Allergy and Clin. Immunol. 136:1065-1073, 2015. **[5]**

357. Gartlan, K. H., Markey, K. A., Varelias, A., Bunting, M. D., Koyama, M., Kuns, R. D., Raffelt, N. C., Olver, S. D., Linberg, K. E., Cheong, M., Teal, B. E., Lor, M., Teng, M. W. L., **Smyth, M. J.,** McCluskey, J., Rossjohn, J., Boyle, G., Lane, S. W., McColl, S. R., MacDonald, K. P. A., and Hill, G. R.: Tc17 cells are a pro-inflammatory, plastic lineage of pathogenic CD8+ T cells that induce graft versus-host disease without anti-leukemia effects. Blood 126:1609-1620, 2015. **[8]**

358. Neeson, P. J.*, Hsu, A. K.*, Chen, Y. R., Halse HM, Loh, J., Cordy, R., Fielding, K., Davis, J., Noske, J., Davenport, A. J. , Lindqvist-Gigg, C. A., Humphries, R., Tai, Y. T., Prince, M. P., Trapani, J. A., **Smyth, M. J.,** and Ritchie, D. S.: Induction of potent NK cell-dependent anti-myeloma cytotoxic T cells in response to combined mapatumumab and bortezomib. Oncoimmunology May 27;4(9):e1038011, 2015.

359. Coquet, J. M., Schuijs, M., **Smyth, M. J.,** Deswarte, K., Beyaert, R., Braun, H., Boon, L., Karlsson Hedestam, G. B., Nutt, S. L., Hammad, H., and Lambrecht, B. N.: IL-21 producing CD4 T cells promotes type 2 immunity to house dust mites. Immunity 43:318-330, 2015. **[10]**

360. Koyama, M., Cheong, M., Markey, K. A., Gartlan, K., Kuns, R. D., Locke, K., Lineburg, K., Teal, B., Leveque-El Mouttie, L., Bunting, M. D., Vuckovic, S., Zhang, P., Teng, M. W. L., Varelias, A., Tey, S. K., Wockner, L. F., Engwerda, C. R., **Smyth, M. J.,** Belz, G. T., McColl, S. R., MacDonald,

K. P. A., and Hill, G. R.: Donor colonic CD103+ dendritic cells determine the severity of graft versus host disease. J. Exp. Med. 212:1303-1321, 2015. **[3]**

361. Ngiow, S-F., Young, A., Jacquelot, N., Yamazaki, T., Enot, D., Zitvogel, L., and **Smyth, M. J.:** A threshhold level of intratumor CD8+ T cell PD-1 expression dictates therapeutic response to anti-PD-1. Cancer Res. 75:3800-3811, 2015. **[10].**

362. Kurtulus, S., Sakuishi, K., Ngiow, S-F., Joller, N., Tan, D. J., Teng, M. W. L., **Smyth, M. J.,** Kuchroo, V. K., and Anderson, A.C: TIGIT predominantly regulates the immune response via regulatory T cells. J. Clin. Invest. 125:4053-4062, 2015. **[9]**

363. Ngiow, S-F., Meeth, K. M., Stannard, K., Barkauskas, D., Bollag, G., Bosenberg, M. W., and **Smyth, M. J.:** Co-inhibition of colony stimulating factor-1 receptor and BRAF oncogene in mouse models of $BRAF^{V600E}$ melanoma. Oncoimmunology 5:e1089381. **[1]**

364. Kara, E. E., McKenzie, D. R., Bastow, C. R., Gregor, C. E., Fenix, K. A., Ogunniyi, A. D., Paton, J. C., Mack, M., Pombal, D. R., Seillet, C., Dubois, B., Liston, A., MacDonald, K. P. A., Belz, G. T., **Smyth, M. J.,** Hill, G. R., Comerford, I. and McColl, S. R.: CCR2 defines the development and homing of IL-23-driven 'pathogenic' Th17 cells. Nature Communications 6:8644, 2015 **[3]**.

365. Sheel, M., Beattie, L., Frame, T. C., de Labastida Rivera, F., Faleiro, R., Bunn, P. T., Montes de Oca, M., Edwards, C. L., Ng, S. S., Kumar, R., Amante, F. H., Best, S. E., McColl, S. R., Varelias, A., Kuns, R. D., MacDonald, K. P., **Smyth M. J.,** Haque, A., Hill, G. R., and Engwerda, C.: Interleukin 17A-producing γδ T cells suppress early control of parasite growth by monocytes in the liver. J. Immunol. 195:5707-5717, 2015. **[2]**

366. Mittal, D., Caramia, F., Michiels, S., Joensuu, H., Kellokumpu-Lehtinen, P-L., Sotiriou, C., Loi, S., and **Smyth, M. J.:** Improved treatment of breast cancer with anti-HER2 therapy requires IL-21 signaling in $CD8^+$ T cells. Cancer Res. 76:264-274, 2016.

367. Viel, S.*, Marcais, A.*, Souza-Fonseca Guimaraes, F. *, Loftus, R., Rabilloud, J., Grau, M., Degouve, S., Djebali, S., Sanlaville, A., Bienvenu, J., Marie, J., Caux, C., Marvel, J., Town, L., Huntington, N., Bartholin, L., Finlay, D., **Smyth, M. J.***, Walzer, T. *: TGF-β inhibits the activation and functions of NK cells by repressing the mTOR pathway. Science Signaling 2016 Feb 16;9(415):ra19. doi: 10.1126/scisignal.aad1884. * Shared authorship. **[1]**

368. Montes de Oca, M., Kumar, R., de Labastida Rivera, F., Amante, F. H., Sheel, M., Faleiro, R. J., Bunn, P. T., Best, S. E., Beattie, L., Ng, S. S., Edwards, C. L., Muller, W., Cretney, E., Nutt, S. L., **Smyth, M. J.,** Haque, A., Hill, G. R., Sundar, S., Kallies, A., and Engwerda, C.: Blimp-1-dependent IL-10 production by Tr1 cells regulates TNF-mediated tissue pathology. PLOS Pathogens 12(1):e1005398. doi: 10.1371/journal.ppat.1005398. eCollection 2016 Jan. **[2]**

369. Blake, S., Stannard, K., Liu, J., Allen, S., Yong, M. C. R., Mittal, D., Roman Aguilera, A., Miles, J., Lutzky, V., Ferrai de Andrade, L., Martinet, L., Colonna, M., Takeda, K., Kuhnel, F., Gurlevik, E., Bernhardt, G., Teng, M. W. L., and **Smyth, M. J.:** Suppression of metastases using a new lymphocyte checkpoint target for cancer immunotherapy. Cancer Discovery 6:446-459, 2016. **[3]**

370. Delconte, R. B., Shi, W., Sathe, P., Ushiki, T., Seillet, C., Minnich, M., Kolesnik, T. B., Rankin, L. C., Mielke, L. A., Zhnag, J-G., Busslinger, M., **Smyth, M. J.,** Hutchinson, D. S., Nutt, S. L., Nicholson, S., Alexander, W. S., Corcoran, L., Vivier, E., Belz, G. T., Carotta, S., and Huntington, N. D.: The helix-loop-helix protein ID2 governs NK cell fate by tuning their sensitivity to interleukin-15. Immunity 44:103-115, 2016. **[4]**

371. Delconte R.B.*, Kolesnik T.B.*, Dagley L.F.*, Rautela J., Liau N., Shi W., Putz E.M., Stannard, K., Zhang J.G., Teh C., Firth M, Ushiki T., Andoniou C.E, Degli-Esposti M.A , Sharp P.P., Sanvitale C.E., Infusini G., Linossi, E.M., Burns C.J., Carotta S., Gray D.H.D., Seillet C., Hutchinson D.S.,

Belz G.T., Webb A.I., Alexander W.S., Li S.S., Bullock A.N., Babon J.J., **Smyth M.J.,** Nicholson, S.E.[#] and Huntington N.D.[#]: CIS is a potent checkpoint in NK cell-mediated tumour immunity. Nature Immunology 17:816-824, 2016 **[1]**

372. Viant, C., Rankin, L. C., Girard-Madoux, M. J. H., Seillet, C., Shi, W., **Smyth, M. J.,** Bartholin, L., Walzer, T., Huntington, N. D., Viver, E., and Belz, G.: Transforming growth factor-β and Notch ligands act as oppoing environmental cues in regulating the plasticity of type 3 innate lymphoid cells. Science Signaling 9(426):ra46, 2016. **[1]**

373. Mittal, D., Sinha, D., Barkauskas, D., Young, A., Kalimutho, M., Stannard, K., Caramia, F., Haibe-Kains, B., Stagg, J., Khanna, K. K., Loi, S., **Smyth, M. J.:** Adenosine 2B receptor expression on cancer cells promotes metastasis. Cancer Res. 76:4372-4382, 2016.

374. Souza-Fonseca Guimaraes, F., Blake, S. J., Makkouk, A., Chester, C., Kohrt, H. E., and **Smyth, M. J.:** Anti-CD137 enhances anti-CD20 therapy of systemic B-cell lymphoma with altered homeostasis but negligible toxicity. Oncoimmunology (in press, 2016).

375. Souza-Fonseca Guimaraes, F., Krsanova, Y., Putoczki, T., Miles, K., McDonald, K. P., Town, L., Shi. W., Gobe, G. C., McDade, L., Mielke, L. A., Tue, H., Masters, S. L., Belz, G. T., Huntington, N. D., Radford-Smith, G., and **Smyth, M. J.:** Granzyme M has a critical role in providing innate immune protection in ulcerative colitis. Cell Death and Disease 7:e2302, 2016.

376. Smith, C., Brennan, R. M., Tey, S-K., **Smyth, M. J.**, Burrows, S. R., Miles, J. J., Hill, G. R., and Khanna, R.: Co-infection with human CMV genetic variants in transplant recipients and its impact on anti-viral T cell immune reconstitution. J. Virol. 90:7497-7507, 2016.

377. Dasari, V., Reehan, S., Tey, S-K., **Smyth, M. J.,** Smith, C., and Khanna, R.: Autophagy and proteasome interconnect to coordinate cross-presentation through MHC class I pathway in B cells. Immunol. Cell Biol. (in press, July 19, 2016).

378. Dasari, V., Schuesller, A., Smith, C., Wong, Y., Miles, J., **Smyth, M. J.,** Ambalathingal, G., Francis, R., Campbell, S., Chambers, D., and Khanna, R.: Prophylactic and therapeutic adenoviral vector-based multivirus-specific T-cell immunotherapy for transplant patients. Molecular Therapy - Methods and Clinical Development 3:16058, 2016.

379. Young, A., Ngiow, S.F., Barkauskas, D. S., Sult, E., Hay, C., Blake, S. J., Liu, J., Takeda, K., Teng, M. W. L., Sachsenmeier, K., and **Smyth, M. J.:** Co-inhibition of CD73 and A2AR adenosine signaling improves anti-tumor immune responses. Cancer Cell (in press, 2016).

380. Liu, J.*, Blake, S. J.*, Fairfax, K. A., Yong, M. C. R., Allen, S., **Smyth, M. J.,** and Teng, M. W. L.: Assessment of the therapeutic index between anti-tumor activity and immune-related adverse toxicities following combination therapies. Cancer Res. (in press, Aug 8, 2016).

381. Ngiow, S-F., Young, A., Blake, S. J., Hill, G. R., Yagita, H., Teng, M. W. L., Korman, A. J., and **Smyth, M. J.:** Agonistic anti-CD40 mAb-driven IL-12 reverses anti-PD-1 resistance of a T cell-rich tumor. Cancer Res. (in press, Sept 2, 2016).

PEER REVIEW REVIEWS:

1. Pietersz, G. A., Kanellos, J., **Smyth, M. J.**, Zalcberg, J., and McKenzie, I. F. C.: The use of antibody-conjugates for the diagnosis and treatment of cancer. Immunol. Cell Biol. 62:111-125, 1987 **[47].**

2. **Smyth, M. J.**, Pietersz, G. A., and McKenzie, I. F. C.: The mode of action of methotrexate-monoclonal antibody conjugates. Immunol. Cell Biol. 65:189-200, 1987 **[33].**

3. **Smyth, M. J.**, Pietersz, G. A., and McKenzie, I. F. C.: The cellular uptake and cytotoxicity of chlorambucil-monoclonal antibody conjugates. Immunol. Cell Biol. 65:315-321, 1987 **[8].**

4. McKenzie, I. F. C., **Smyth, M. J.**, Kanellos, J., Cunningham, Z., Sacks, N. P. M., and Pietersz, G. A.: Preclinical studies with a variety of immunoconjugates. Antibody: Immunoconjugates and Radiopharmaceuticals 1:79-103, 1988 **[15].**

5. Tjandra, J. J., **Smyth, M. J.**, Pietersz, G. A., and McKenzie, I. F. C.: The role of monoclonal antibodies (MoAbs) in the therapy of solid tumors. Aust. N. Z. J. Surg. 58:843-849, 1988 **[3].**

6. Pietersz, G. A., **Smyth, M. J.**, Kanellos, J., Cunningham, Z., and McKenzie, I. F. C.: Preclinical studies with immunoconjugates. J. D. Rodwell (ed.) In: Targeted Diagnosis and Therapy, Marcell Dekker, USA 2:73-98, 1989 **[n/a].**

7. Pietersz, G. A., **Smyth, M. J.**, Tjandra, J. J., and McKenzie, I. F. C.: Preclinical and clinical studies with N-acetyl-Melphalan immunoconjugates and tumour necrosis factor-α. Antibody: Immunoconjugates and Radiopharmaceuticals 2:47-61, 1989 **[2].**

8. Pietersz, G. A., **Smyth, M. J.**, and McKenzie, I. F. C.: The use of monoclonal antibodies for immunochemotherapy of cancer. Proceedings of the 8th Biotechnology Conference, 52-55, 1989 **[n/a].**

9. Trapani, J.A. and **Smyth, M.J.**: Killing by cytotoxic T cells and NK cells: multiple granule serine proteases as initiators of DNA fragmentation. Immunol. Cell. Biol. 71:201-208, 1993 **[52].**

10. **Smyth, M. J.,** Browne, K. A., Thia, K. Y. T., Apostolidis, V., Kershaw, M. H., and Trapani, J. A.: Cytotoxic lymphocyte granule serine proteases activate target cell endonucleases to trigger apoptosis. Clin. Exp. Pharmacol. Physiol. 21:67-70, 1994 **[24].**

11. Pietersz, G. A., Rowland, A., **Smyth, M. J.**, and McKenzie, I. F. C.: Chemoimmunoconjugates for the treatment of cancer. Adv. Immunnol. 56:301-387, 1994 **[36].**

12. **Smyth, M. J.**: Unravelling a cell death strategy. Today's Life Science 6:26-30, 1994 **[n/a].**

13. **Smyth, M. J.**, and Trapani, J. A.: Granzymes - exogenous proteinases that induce target cell apoptosis. Immunol. Today 16:202-206, 1995 **[415].**

14. **Smyth, M. J.**: Dual mechanisms of lymphocyte-mediated cytotoxicity serve to control and effect the immune response. BioEssays 17:891-898, 1995 **[16].**

15. **Smyth, M. J.** and Kershaw, M. H.: Cytotoxic lymphocyte-mediated immunotherapy. ANZ J. Med. 25:852-858, 1995 **[3].**

16. Kershaw, M. H., Trapani, J. A., and **Smyth, M. J.**: Cytotoxic lymphocytes: redirecting the cell-mediated immune response for the therapy of cancer. Therapeutic Immunology 2: 173-182, 1996 **[26].**

17. **Smyth, M. J.**, O'Connor, M. D., and Trapani, J. A.: Granzymes: a variety of serine protease specificities encoded by genetically distinct subfamilies. J. Leukoc. Biol. 60:555-562, 1996 **[95].**

18. **Smyth, M. J.**, and Trapani, J. A.: The relative role of lymphocyte granule exocytosis versus death receptor-mediated cytotoxicity in viral pathophysiology. J. Virology 72:1-9, 1998 **[77].**

19. Johnstone, R. W., and **Smyth, M. J.**: The question begs - what is the role of P-gp in normal physiology? Drug Resist. Updates 1:340-342, 1998 **[0].**

20. Warren, H. S., and **Smyth, M. J.**: NK cells and apoptosis. Immunol. Cell. Biol. 77:64-75,1999 **[73].**

21. Johnstone, R. W., Ruefli, A., and **Smyth, M. J.**: P-glycoprotein: more than just a drug pump? Todays Life Sciences 11:66-72, 1999 **[n/a].**

22. Trapani, J. A., Sutton, V. R., and **Smyth, M. J.**: Cytotoxic lymphocyte granules: evolution of vesicles essential for combating virus infections. Immunol. Today 20:351-356, 1999 **[109].**

23. Johnstone, R. W., Ruefli, A., and **Smyth, M. J.**: Challenging the dogma: multiple physiological functions for P-glycoprotein? TIBS 25:1-6, 2000 **[381].**

24. Trapani, J. A., Davis J., Sutton, V. R., and **Smyth, M. J.:** Pro-apoptotic functions of cytotoxic lymphocyte granule constituents in vitro and in vivo. Curr. Opin. Immunol. 12:323-329, 2000 **[150].**

25. Farrell, H., Degli-Esposti, M., Densley, E., Cretney E, **Smyth, M.**, and Davis-Poynter, N.: Cytomegalovirus MHC class I homologues and inhibition of natural killer cells. Microbes and Immunity 5:1-12, 2000 **[22].**

26. **Smyth, M. J.** and Johnstone, R. W.: The role of TNF in lymphocyte-mediated cytotoxicity. In "Biology of Tumor Necrosis Factor α." Microsc Res Tech. 50:196-208, 2000 **[66].**

27. Johnstone, R. W., Ruefli, A., Tainton, K. M., and **Smyth, M. J.**: A role for P-glycoprotein in regulating cell death. Leukemia and Lymphoma 38:1-11, 2000 **[141].**

28. Godfrey, D. I., Hammond, K. J. L., Poulton, L. D., **Smyth, M. J.,** and Baxter, A. G.: NKT cell facts, functions, and fallacies. Immunol. Today 21:573-583, 2000 **[888].**

29. **Smyth, M. J.** and Godfrey, D. I.: NKT cells and anti-tumor immunity – a double-edged sword. Nature Immunology 1:459-460, 2000 **[209].**

30. **Smyth, M. J.,** Godfrey, D. I., and Trapani, J. A.: A fresh look at tumor immunosurveillance and immunotherapy. Nature Immunology 2:293-299, 2001 **[723].**

31. **Smyth, M. J.,** Kelly, J. M., Sutton, V. R., Davis, J. E., Browne, K. A., Sayers, T. J., and Trapani, J. A.: Unlocking the secrets of cytotoxic granule proteins. J. Leukocyte. Biol. 70:18-29, 2001 **[200].**

32. **Smyth, M. J.,** and Trapani, J. A.: Lymphocyte-mediated immunosurveillance of epithelial cancers? Trends in Immunology 22:409-411, 2001 **[47].**

33. **Smyth, M. J.:** Cancer immunotherapy – broader considerations. Trends in Immunology 22:642, 2001 **[1].**

34. Ruefli, A.A., Davis, J. E., Sutton, V. R., Trapani, J. A., **Smyth, M. J.,** and Johnstone, R. W.: Dissecting the apoptotic mechanisms of chemotherapeutic drugs and lymphocytes to design effective anti-cancer therapies. Drug Development Res. 99:292-298, 2002 **[5].**

35. **Smyth, M. J.**, Crowe, N. Y., Hayakawa, Y., Takeda, K., Yagita, H., and Godfrey, D. I.: NKT cells – conductors of tumor immunity? Curr. Opin. Immunol. 14:165-171, 2002 **[331].**

36. Baxter, A. G. and **Smyth, M. J.:** The role of NK cells in autoimmune disease. Autoimmunity 35:1-14, 2002 **[98].**

37. Trapani, J. A., and **Smyth, M. J.:** Functional significance of the perforin/granzyme cell death pathway. Nature Reviews Immunology 2:735-747, 2002 **[854].**

38. **Smyth, M. J.,** Hayakawa, Y., Takeda, K., and Yagita, H.: New aspects of natural killer cell-mediated tumor surveillance and therapy. Nature Reviews Cancer 2:850-861, 2002 **[575].**

39. **Smyth, M. J.***, Takeda, K.*, Hayakawa, Y., Peschon, J. J., van den Brink, M. R. M., and Yagita, H.: Nature's TRAIL – on a path to cancer immunotherapy. Immunity 18:1-6, 2003 **[344]. *** equal authorship.

40. **Smyth, M. J.:** Perforin. Modern Aspects of Immunobiology 3:12, 2003 **[3].**

41. **Smyth, M. J.** and Kershaw, M. H.: Discovery of an innate cancer resistance gene. Molecular Interventions 3:186-189, 2003 **[3].**

42. **Smyth, M. J.**: Innate immunity. Book Review. Immunol. Cell Biol. 81:332-333, 2003 **[n/a].**

43. Schreiber, R. D., Old, L. J., Hayday, A. C., and **Smyth, M. J.:** A plethora of new evidence supports the revival of the cancer immunosurveillance concept. Nat. Immunol. 5:4-5, 2004 **[73].**

44. Godfrey, D. I., MacDonald, H. R., Kronenberg, M., **Smyth, M. J.,** and Van Kaer, L.: NKT cells – What's in a name? Nature Reviews Immunology 4:231-237, 2004 **[936].**

45. Swann, J., Crowe, N. Y., Hayakawa, Y., Godfrey, D. I., and **Smyth, M. J.:** Regulation of anti-tumour immunity by CD1d-restricted NKT cells. Immunol. Cell Biol. 82:323-331, 2004 **[69].**

46. Nutt, S. L., Brady, J., Hayakawa, Y., and **Smyth, M. J.**: Interleukin 21: a key player in lymphocyte maturation. Critical Reviews in Immunology 24:239-250, 2004 **[33].**

47. Yagita, H., Takeda, K., Hayakawa, Y., **Smyth, M. J.**, and Okumura, K.: TRAIL and its receptors as a target for cancer therapy. Cancer Science 95:777-783, 2004 **[263].**

48. Godfrey, D. I., Pellicci, D., and **Smyth, M. J.:** The elusive NKT cell antigen – Is the search over? Science 306:1687-1688, 2004 **[45].**

49. **Smyth, M. J.,** Cretney, E., Kershaw, M. H., and Hayakawa, Y.: Cytokines in cancer immunity and immunotherapy. Immunol. Rev. 202:275-293, 2004 **[270].**

50. **Smyth, M. J.** and Cretney, E.: Immunological research review. Immunol. Res. 30:255-256, 2004 **[n/a].**

51. **Smyth, M. J.,** and Hayakawa, Y.: Evidence for the existence of cancer immunosurveillance. Annals of Cancer Research and Therapy. 12:9-32, 2004 **[n/a].**

52. **Smyth, M. J.,** Cretney, E., Kelly, J. M., Westwood, J. A., Street, S. E A., Yagita, H., Takeda, K., van Dommelen, S. L., Degli-Esposti, M. A., and Hayakawa, Y.: Activation of NK cell cytotoxicity. Mol. Immunol. 42:501-510, 2005 **[345].**

53. Andrews, D. M., Andoniou, C. E., Scalzo, A. A., Wallace, M. E., **Smyth, M. J**., and Degli-Esposti, M. A.: Cross-talk between dendritic cells and natural killer cells in viral infection. Mol. Immunol. 42:547-555, 2005 **[102].**

54. Degli-Esposti, M. A., and **Smyth, M. J.:** Close encounters of different kinds: dendritic cells and NK cells take centre stage. Nature Reviews. Immunol. 5:112-124, 2005 [**472**].

55. Wallace, M. E., and **Smyth, M. J.:** The role of NK cells in tumor control – effectors and regulators of adaptive immunity. Springer Seminars in Immunopathology 27:49-64, 2005 **[89].**

56. Cretney, E., Uldrich, A. P., Berzins, S. P., Strasser, A., Godfrey, D. I., and **Smyth, M. J.**: Are we really on the right TRAIL? Immunol. Res. 31:161-164, 2005 **[2].**

57. Berzins, S. P., **Smyth, M. J**., and Godfrey, D. I.: Working with NKT cells – pitfalls and practicalities. Curr. Opin. Immunol. 17:448-454, 2005 **[46].**

58. **Smyth, M. J.,** Voskoboinik, I., and Trapani, J. A.: Immune surveillance of lymphoma in humans? BLOOD 105:4159-4160, 2005 **[1].**

59. **Smyth, M.J**. Type I interferon and cancer immunoediting. Nature Immunology 6: 646-648, 2005 **[21].**

60. Kershaw, M. K., Teng, M. W. L., **Smyth, M. J.,** and Darcy, P. K. Supernatural T cells for cancer immunotherapy. Nature Reviews Immunology 5:928-940, 2005 **[130]**. [Front Cover].

61. Trapani, J. A., and **Smyth, M. J**.: Report on Apoptosis and Immunity, 31 May-3 June 2005, Palm Cove, Queensland, Australia Immunol. Cell. Biol. 84:1-5, 2006 **[1].**

62. **Smyth, M. J.,** Dunn, G. P., and Schreiber, R. D.: Cancer immunosurveillance and immunoediting: The roles of immunity in suppressing tumor development and shaping tumor immunogenicity. Advances in Immunology 90:1-50, 2006 **[536].**

63. Hayakawa, Y. and **Smyth, M. J.:** Innate immune recognition and suppression of tumors. Adv. Cancer Res. 95:293-322, 2006 **[79].**

64. Hayakawa, Y. and **Smyth, M. J.:** NKG2D and cytotoxic effector function in tumor immune surveillance. Seminars In Immunology 18:176-185, 2006 **[88].**

65. **Smyth, M. J.** and Nutt, S. L.: IL-7 and the thymus dictate the NK cell labor market. Nature Immunology 7:1134-1136, 2006 **[5].**

66. Voskoboinik, I., **Smyth, M. J.,** and Trapani, J. A.: Perforin-mediated target-cell death and immune homeostasis. Nature Reviews Immunology 6:940-952, 2006 **[372].**

67. Hayakawa, Y., Huntington, N. D., Nutt, S. L., and **Smyth, M. J.:** Functional subsets of mouse natural killer cells. Immunol Rev. 214:47-55, 2006 **[161].**

68. Cretney, E., Takeda, K., and **Smyth, M. J.:** Cancer: novel therapeutic strategies that exploit the TRAIL/TRAIL receptor pathway. Int. J. Biochem. Cell. Biol. 39:280-286, 2007 **[85].**

69. **Smyth, M. J.,** Swann, J., and Hayakawa, Y.: Innate tumor immune surveillance. Adv. Exp. Med. Biol. 590:103-111, 2007 **[13].**

70. Clarke, C., and **Smyth, M. J.:** Calreticulin exposure increases cancer immunogenicity. Nature Biotechnology 25:192-193, 2007 **[45].**

71. **Smyth, M. J.:** Tumour immunology. Curr. Opin. Immunol. 19:200-202, 2007 **[4].**

72. Bolitho, P., Voskoboinik, I. Trapani, J. A., and **Smyth, M. J.:** Apoptosis induced by the lymphocyte effector molecule perforin. Curr. Opin. Immunol. 19:339-347, 2007 **[110].**

73. Takeda, K., Stagg, J., Yagita, H., Okumura, K., and **Smyth, M. J.:** Targeting death-inducing receptors in cancer therapy. Oncogene 26:3745-3757, 2007 **[149].**

74. Swann, J. B., and **Smyth, M. J**.: Immunesurveillance of tumors. J. Clin. Invest. 117:1137-1146, 2007 **[681].**

75. Stagg, J. and **Smyth, M. J**.: NK cell-based cancer immunotherapy. Drug News Perspect. 20:155-163, 2007 **[18].**

76. Swann, J. B., Coquet, J. M., Godfrey, D. I., and **Smyth, M. J.:** CD1-restricted T cells and tumor immunity. Curr. Top. Microbiology. Immunol. 314:293-323, 2007 **[64].**

77. Takeda, K., Yagita, H., and **Smyth, M. J.:** Combination antibody-based immunotherapy. Cancer Science 98:1297-1302, 2007 **[22].**

78. Stagg, J. Johnstone, R. W., and **Smyth, M. J.:** From cancer immunosurveillance to cancer immunotherapy. Immunol Rev. 220:82-101, 2007 **[80].**

79. Davis, I. D., Skak, K., **Smyth, M. J.,** Kristjansen, P. E. G., Miller, D. M., and Sivakumar, P. V.: IL-21 signalling: functions in cancer and autoimmunity. Clin. Cancer Res. 13:6926-6932, 2007 **[79].**

80. Andrews, D. M., and **Smyth, M. J.:** Stress gets under your skin. Nature Immunology 9:119-120, 2008 **[1].**

81. Andrews, D. M., Maraskovsky, E., and **Smyth, M. J.:** Cancer vaccines for established cancer – how to make them better? Immunol.Rev. 222:242-255, 2008 **[48].**

82. Skak, K., Kragh, M., Hausmann, D., **Smyth, M. J.*,** and Sivakumar, P. V.***:** Interleukin-21: combination strategies for cancer therapy. Nature Reviews Drug Discovery 7:231-240, 2008 **[87]. *equal senior author.**

83. **Smyth, M. J.:** NK cells and NKT cells collaborate in host protection from methylcholanthrene-induced fibrosarcoma. Int. Immunol. 20:631, 2008 **[2].**

84. **Smyth, M. J.:** Clarification of data used in three studies on MCA-induction of sarcoma in mice. BLOOD 111:4419, 2008 **[4].**

85. Teng, M. W. L., Swann, J. B., Koebel, C. M., Vesely, M. D., Schreiber, R. D., and **Smyth, M. J.:** Immune-mediated dormancy: an equilibrium with cancer. J. Leuk. Biol. 84:988-993, 2008 **[203].**

86. Johnstone, R. W., Frew, A. J., and **Smyth, M. J.:** The TRAIL apoptotic pathway in cancer onset, progression and therapy. Nature Reviews Cancer 8:782-798, 2008 **[605].**

87. Haynes, N. M., van der Most, R. G., Lake, R. A., and **Smyth, M. J.:** Immunogenic anti-cancer chemotherapy as an emerging concept. Curr. Opin. Immunol. 20:545-557, 2008 **[80].**

88. Chan, C. J., Andrews, D. M., and **Smyth, M. J.:** Can NK cells be a therapeutic target in human diseases? Eur J. Immunol. 38:2964-2968, 2008 **[27].**

89. Stewart, T. J. and **Smyth, M. J.:** Chemokine-chemokine receptors in cancer immunotherapy. J. Immunotherapy 1:109-127, 2009 **[21].**

90. Ritchie, D. S., and **Smyth, M. J.:** A new therapeutic target for leukemia comes to the surface. CELL 138:226-228, 2009 **[16].**

91. **Smyth, M. J.:** Immune system versus cancer. Scientist 23:36-41, 2009 **[1].**

92. Aymeric, L., Apetoh, L., Ghiringhelli, F., Tesniere, A., Martin, I., Kroemer, G.*, **Smyth, M. J.*,** and Zitvogel, L.*: Tumor apoptosis and ATP release prime DC and efficient anti-cancer immunity. Cancer Res. 70:855-888, 2010 **[176].** *equal senior authors.

93. Quach, H., Ritchie, D., Stewart, A.K., Neeson, P., Harrison, S., **Smyth, M. J.,** and Prince, H. M.: Mechanism of action of immunomodulatory drugs (IMiDS) in multiple myeloma. Leukemia 24:22-32, 2010 **[255].**

94. Hayakawa, Y., Andrews, D. M., and **Smyth, M. J.:** Subset analysis of human and mouse mature NK cells. Methods Mol. Biol. 612:27-38, 2010 **[11].**

95. Anthony, D. A., Andrews, D. M., Trapani, J. A., and **Smyth, M. J.:** Functional dissection of the granzyme family: cell death and inflammation. Immunol. Rev. 235:73-92, 2010 **[72].**

96. Pegram, H. J., Haynes, N. M., **Smyth, M. J.,** Kershaw, M. H., and Darcy, P. K.: Characterizing the anti-tumor function of adoptively transferred NK cells in vivo. Cancer Immunol. Immunother. 59:1235-1246, 2010 **[22].**

97. Ma, Y., Kepp, O., Ghiringhelli, F., Apetoh, L., Aymeric, L., Locher, C., Tesniere, A., Martins, I., Ly, A., Haynes, N. M., **Smyth, M. J.*,** Kroemer, G.*, Zitvogel, L.*: Chemotherapy and radiotherapy : cryptic anticancer vaccines. Sem. Immunol. 22:113-124, 2010 **[113]** *equal senior authorship.

98. **Smyth, M. J.,** and Stagg, J.: Preview: Her 2 in 1. Cancer Cell 18:101-102, 2010 **[6].**

99. Stagg, J. and **Smyth, M. J.**: Extracellular ATP and adenosine in cancer. Oncogene 29:5346-5358, 2010 **[217].**

100. Mattarollo, S. R., and **Smyth, M. J.:** A novel axis of innate immunity in cancer. Nature Immunology 11:981-982, 2010 **[9].**

101. Verbrugge, I., Johnstone, R. W., and **Smyth, M. J.:** Extrinsic signaling pathways that lead to apoptosis. CELL 143:1192-1192.e2, 2010 **[7].**

102. Pegram, H. J., Ritchie, D. S., **Smyth, M. J.,** Wiernik, A., Prince, H. M., Darcy, P. K., and Kershaw, M. H.: Alloreactive natural killer cells in hematopoietic stem cell transplantation. Leuk. Res. 35:14-21, 2010 **[24].**

103. Teng, M. W. L., Ritchie, D. S., Neeson, P., and **Smyth, M. J.:** Biology and clinical observations of regulatory T cells in cancer immunology. Curr. Topics. Microbiol. Immunol. 344:61-95, 2011 **[23].**

104. Pegram, H. J., Andrews, D. M., **Smyth, M. J.,** Darcy, P. K., and Kershaw, M. H.: Activating and inhibitory receptors of natural kiler cells. Immunol. Cell Biol. 89:216-224, 2011 **[135].**

105. Berzins, S. P., **Smyth, M. J.**, and Baxter, A. G.: Presumed guilty: natural killer T cell defects and human disease. Nature Reviews Immunology 11:131-142, 2011 **[203].**

106. Vesely, M. D., Kershaw, M. H., Schreiber, R. D., and **Smyth, M. J.:** Natural innate and adaptive immunity to cancer. Annual Reviews in Immunology 29:235-271, 2011 **[788].**

107. Schreiber, R. D., Old, L. J., and **Smyth, M. J.:** Cancer immunoediting: integrating immunity's roles in cancer suppression and promotion. Science 331:1565-1570, 2011 **[1711].**

108. Stewart, T. J., and **Smyth, M. J.:** Improving cancer immunotherapy by targeting tumor-induced immune suppression. Cancer Metastasis Rev. 30:125-140, 2011 **[77].**

109. **Smyth, M. J.**, and Kershaw, M. H.: The adjuvant effects of antibodies. Science 333:944-945, 2011 **[3].**

110. Ngiow, S., Teng, M. W. L., and **Smyth, M. J.:** Prospects for TIM3 targeted anti-tumor immunotherapy. Cancer Res. 71:6567-6571, 2011 **[49].**

111. Teng, M. W. L., Darcy, P. K.*, and **Smyth, M. J.*:** Stable IL-10: a new therapeutic that promotes tumor immunity. Cancer Cell 20:691-693, 2011 **[16]. *equal senior author.**

112. Haynes, N. M. and **Smyth, M. J.:** Immunotherapeutic strategies as adjuncts to local radiotherapy. Immunotherapy 4:129-131, 2012 **[1].**

113. Chow, M., Moller, A., and **Smyth, M. J.**: Inflammation and immune surveillance in cancer. Seminars in Cancer Biology 22:23-32, 2012 **[97].**

114. Chan, C. J., Andrews, D. M., and **Smyth, M. J.:** Receptors of nectin and nectin-like proteins in the immunosurveillance and immunotherapy of cancer. Curr. Opin. Immunol. 24:246-251, 2012 **[47].**

115. **Smyth, M. J.:** Lloyd John Old. 1933-2011. Obituary. Nature Immunology 13:103, 2012 **[1].**

116. Meyaard, L., and Smyth, M. J.: Liberating tumor immunity. Curr. Opin. Immunol. 24:204-206, 2012 **[1].**

117. Beavis, P. A., Stagg, J., Darcy, P. K., and **Smyth, M. J.:** CD73: a potent suppressor of anti-tumor immune responses. Trends in Immunology 33:231-237, 2012 **[105].**

118. Verbrugge, I., Galli, M., **Smyth, M. J.,** Johnstone, R. W., and Haynes, N. M.: Enhancing the anti-tumor activity of radiotherapy with combinations of immune stimulatory and inhibitory antibodies. Oncoimmunology 1:1629-1631, 2012 **[5].**

119. Sceneay, J., Parker, B. S., **Smyth, M. J.,** and Moller, A.: Hypoxia-driven immunosuppression contributes to the pre-metastatic niche. OncoImmunology 2:e22355, 2013 **[9].**

120. Mattarollo, S. R., and **Smyth, M. J.:** NKT cell adjuvants in therapeutic vaccines against hematological cancers. Oncoimmunology 2:e22615, 2013 **[7].**

121. Sceneay, J., **Smyth, M. J.*,** and Moller, A.*: The pre-metastatic nice: finding common ground. Cancer and Metastasis Reviews 32:548-555, 2013 **[91].**

122. **Smyth, M. J.,** Sullivan, L. C., Brooks, A. G., and Andrews, D. M.: Non-classical class I molecules regulating natural killer cell function. Oncoimmunology 2:e23336, 2013 **[2].**

123. Ngiow, S-F.*, Knight, D. A.*, Ribas, A., McArthur, G. A., and **Smyth, M. J.:** BRAF targeted therapy and immune responses to melanoma. Oncoimmunology 2:e24462, 2013 **[10]**

124. Chan, C. J., **Smyth, M. J.*,** Martinet, L.*: Molecular mechanisms of natural killer cell activation in response to cellular stress. Cell Death and Differentiation 21:5-14, 2013 **[47].**

125. Ngiow, S-F., Teng, M. W. L., and **Smyth, M. J.:** A balance of IL-12 and IL-23 in cancer. Trends Immunol. 34:548-55, 2013 **[35].**

126. Guimaraes, F. S. F., and **Smyth, M. J.:** Myeloid TGF-β responsiveness promotes metastases. Cancer Discovery 3:846-848, 2013. **[1]**

127. Kershaw, M. H., and **Smyth, M. J.:** Making macrophages eat cancer. Science 341:41-42, 2013 **[6].**

128. Zitvogel, L., Galluzzi, L., **Smyth, M. J.,** and Kroemer, G.: Mechanism of action of conventional and targeted anticancer therapies: reinstating immunosurveillance. Immunity 39:74-88, 2013 **[222].**

129. Beavis, P. A., Milenkovski, N., Stagg, J., **Smyth, M. J.,** and Darcy, P. K.: A_{2A} blockade enhances anti-metastatic tumor activity. Oncoimmunology 2e26705, 2013 **[2].**

130. Ferrari de Andrade, L., **Smyth, M. J.*,** and Martinet, L.*: DNAM-1 control of natural killer cell functions through nectin and nectin-like proteins. Immunol. Cell Biol. 92:237-244, 2014 **[40].**

131. West, A. C., **Smyth, M. J.,** and Johnstone, R. W.: The anticancer effects of HDACi require the immune system. Oncoimmunology 3e27414, 2014. **[20]**

132. Teng, M. W. L. and **Smyth, M. J.:** Can cancer trigger autoimmunity? Science 343:147-148, 2014. **[6]**

133. Mittal, D., Gubin, M., Schreiber, R. D.*, and **Smyth, M. J.*:** New insights into cancer immunoediting and its three component phases – Elimination, Equilibrium and Escape. Curr. Opin. Immunol. 27:16-25, 2014. **[166]**

134. **Smyth, M. J.** and Teng, M. W. L.: Targeting the IL-12/IL-23 axis. An alternative approach to removing tumor-induced immune suppression. Oncoimmunology May 1; 3e28964, 2014 **[3].**

135. **Smyth, M. J.,** Ngiow, S. F., and Teng, M. W. L.: Targeting regulatory T cells in tumor immunotherapy. Immunol. Cell Biol. 92:473-474, 2014. **[6]**

136. Young, A., Mittal, D., Stagg, J. and **Smyth, M. J.:** Targeting cancer-derived adenosine – new therapeutic approaches. Cancer Discovery 4:879-888, 2014. **[32]**

137. Kepp, O, et al…**Smyth, M. J.,** …Galluzzi, L.: Consensus guidelines for the detection of immunogenic cell death. Oncoimmunology 3(9), e955691, 2014. **[92]**

138. Young, A., Mittal, D., Stannard, K., Yong, M., Teng, M. W. L., Allard, B., Stagg, J., and **Smyth, M. J.:** Co-blockade of immune checkpoints and adenosine A2A receptor suppresses metastasis. Oncoimmunology Dec 15;3(10):e958952. eCollection 2014 Nov. **[3]**

138. Kansara, M., Teng, M. W. L., **Smyth, M. J.,** and Thomas D. M.: Translational biology of osteosarcoma. Nature Reviews Cancer 14:722-735, 2014. **[60]**

139. Liu, J., Blake, S. J., **Smyth, M. J.,** and Teng M. W.: Improved mouse models to assess tumour immunity and irAEs after combination cancer immunotherapies. Clin Transl Immunology 3(8):e22, 2014. **[9]**

140. Galluzzi, L., Vacchelli, E., Bravo-San Pedro, J-M., Buque, A., Senovilla, L.,…. **Smyth, M. J.,**… and Kroemer, G.: Classification of current anticancer immunotherapies. Oncotarget 5:12472-12508, 2014. **[76]**

141. Martinet, L., and **Smyth, M. J.:** Balancing NK cell activation through paired receptors. Nature Reviews Immunology 15:243-254, 2015. **[43]**

142. Ferrari de Andrade, L., Ngiow, S. F., Martinet, L, and **Smyth, M. J.:** Natural killer cell mediated control of BRAFV600E mutant melanoma during targeted therapy. Oncoimmunology 2015 Apr 1;4(4):e998119. **[1]**

143. Ngiow, S. F., McArthur, G. A., and **Smyth, M. J.:** Radiotherapy complements immune checkpoint blockade. Cancer Cell. 27:437-438, 2015. **[10]**

144. Teng, M. W. L., Ngiow, S. F., Ribas, A., and **Smyth, M. J.:** Classifying cancers based on T cell infiltration and PD-L1. Cancer Research 75:2139-2145, 2015 **[33].**

145. Zitvogel, L., Galluzzi, L., Kepp, O., **Smyth, M. J.,** and Kroemer, G.: Type I interferons in anticancer immunity. Nature Reviews Immunology 15:405-414, 2015. **[40]**

146. Guillerey, C., and **Smyth, M. J.:** NK cells and cancer immunoediting. Curr. Top. Microbiol. Immunol. (in press, May 30, 2015). **[4]**

147. Teng, M. W. L., Galon, J., Fridman, W-H, and **Smyth, M. J.:** From mice to humans: developments in cancer immunoediting. J. Clin Invest. 125:3338-3346, 2015. **[10]**

148. Souza-Fonseca Guimaraes, F., Young, A., and **Smyth, M. J.:** IFN type III: in vivo NK cell response. Oncotarget 6: 19660-19661, 2015). **[1]**

149. Teng, M. W. L., Bowman, E. P., McElwee, J. J., **Smyth, M. J.,** Casnova, J. L., Cooper, A. M., and Cua, D. J.: IL-12 and IL-23 cytokines: from discovery to targeted therapies for immune-mediated inflammatory diseases. Nature Medicine 21:719-729, 2015. **[37]**

150. Huntington, N. D., Martinet, L, and **Smyth, M. J.:** DNAM-1: Would the real natural killer cell please stand up? Oncotarget 6:28537-28538, 2015.

151. Krasnova, Y., Putz, E. M., **Smyth, M. J.*,** and Souza-Fonseca Guimaraes, F.*: Bench to bedside : NK cell control of metastasis. Clinical Immunology (in press, Oct 14. pii: S1521-6616 (15)30050-4. 2015). **[2]**

152. **Smyth, M. J.,** Ngiow, S-F., Ribas, A., and Teng, M. W. L.: Combination cancer immunotherapies tailored to the tumor microenvironment. Nature Reviews Clinical Oncology 2015 Nov 24. doi: 10.1038/nrclinonc.2015.209. [Epub ahead of print] **[14].**

153. Savas, P., Salgado, R., Denkert, C., Sotiriou, C., Darcy, P. K., **Smyth, M. J.,** and Loi, S.: Clinical relevance of host immunity in breast cancer: from tumor infiltrating lymphocytes to the clinic. Nature Reviews Clinical Oncology 2015 Dec 15. doi: 10.1038/nrclinonc.2015.215. [Epub ahead of print] Review. (in press, 2015). **[10]**

154. Ngiow, S-F., Loi, S., Thomas, D., and **Smyth, M. J.:** Mouse models of tumor immunotherapy. Adv. Immunol. 130:1-24, 2016.

155. Apetoh L, **Smyth MJ**, Drake CG, Abastado JP, Apte RN, Ayyoub M, Blay JY, Bonneville M, Butterfield LH, Caignard A, Castelli C, Cavallo F, Celis E, Chen L, Colombo MP, Comin-Anduix B, Coukos G, Dhodapkar MV, Dranoff G, Frazer IH, Fridman WH, Gabrilovich DI, Gilboa E, Gnjatic S, Jäger D, Kalinski P, Kaufman HL, Kiessling R, Kirkwood J, Knuth A, Liblau R, Lotze MT, Lugli E, Marincola F, Melero I, Melief CJ, Mempel TR, Mittendorf EA, Odun K, Overwijk WW, Palucka AK, Parmiani G, Ribas A, Romero P, Schreiber RD, Schuler G, Srivastava PK, Tartour E, Valmori D, van der Burg SH, van der Bruggen P, van den Eynde BJ, Wang E, Zou W, Whiteside TL, Speiser

DE, Pardoll DM, Restifo NP, Anderson AC.: Consensus nomenclature for $CD8^+$ T cell phenotypes in cancer. Oncoimmunology 2015 Feb 25;4(4):e998538 **[9].**

156. Garg, A. D., Galluzzi, L., Apetoh, L., Baert, T., Birge, R. B., Bravo-San Pedro, J. M., Breckpot, K., Brough, D., Chaurio, R., Cirone, M., Coosemans, A., Coulie, P. G., De Ruysscher, D., Dini, L., de Witte, P., Dudek-Peric, A., Faggioni, A., Fucikova, A., Gaipl, U., Golab, J., Gougeon, M-L., Hamblin, M. R., Hemminki, A., Herrmann, M., Hodge, J. W., Kepp, O., Kroemer, G., Krysko, D. V., Land, W.G., Madeo, F., Manfredi, A. A., Mattarollo, S.R., Maueroder, C., Merendino, N., Multhoff, G., Pabst, T., Ricci, J-E., Riganti, C., Romano, E., Rufo, N., **Smyth, M. J.,** Sonnemann, J., Spisek, R., Stagg, J., Vacchelli, E., Vandenabeele, P., Vandenberk, L., Van den Eynde, B. J., Van Gool, S., Velotti, F., Zitvogel, L., and Agostinis, P.: Molecular and translational classifications of DAMPs in immunogenic cell death. Frontiers Immunology (in press, Nov 20, 6:588. doi:10.3389/fimmu.2015.00588. eCollection 2015). **[15]**

157. Barkauskas, D., and **Smyth, M. J.:** Irradiation and combination therapy. Translational Cancer Research (in press, 2016).

158. Guillerey, C., Nakamura, K., Vuckovic, S., Hill, G. R., and **Smyth, M. J.:** Immune responses in multiple myeloma: role of the natural immune surveillance and potential of immunotherapies. Cellular and Molecular Life Sciences (in press, 2016). **[1]**

159. Restifo, N. P.*, **Smyth, M. J.*,** and Snyder, A.*: Acquired resistance to immunotherapy and future challenges. Nature Reviews Cancer 16:121-126, 2016 **[5].**

160. Austin, R., **Smyth, M. J.***, and Lane, S.*: Harnessing the immune system in acute myeloid leukemia. Critical Reviews in Oncology and Hematology 103:62-77, 2016.

161. Guillerey, C., Huntington, N. D., and **Smyth, M. J.:** Targeting natural killer cells in cancer immunotherapy. Nature Immunology 17:1025-1036, 2016.

162. Teng, M. W. L., Khanna, R. and Smyth, M. J: Checkpoint immunotherapy: picking a winner. Cancer Discovery 6:818-820, 2016.

163. Zitvogel, L., Pitt, J. M., Daillere, R., **Smyth, M. J.,** and Kroemer, G.: Modelling the immunobiology of cancer in mice. Nature Reviews Cancer (in press, 2016).

164. Ambalathingal, G. R., Francis, R. S., **Smyth, M. J.,** Smith, C., and Khanna, R.: BK polyomavirus: clinical aspects, immune regulation, and emerging therapies. Clinical Microbiology Reviews (in press, 2016).

165. Blake, S. J., Dougall, W. C., Miles, J. J., Teng, M. W. L., and **Smyth, M. J.:** Molecular pathways: targeting CD96 and TIGIT for cancer immunotherapy. Clin. Cancer Res. (in press, 2016)

BOOK CHAPTERS:

1. Pietersz, G. A., **Smyth, M. J.**, and McKenzie, I. F. C.: The use of anthracycline-antibody complexes for specific anti-tumor therapy. J. D. Rodwell (ed.) In: Targeted Diagnosis and Therapy, Marcell Dekker, USA 1:25-53, 1988 **[12].**

2. **Smyth, M. J.**, Pietersz, G. A., and McKenzie, I. F. C.: Monoclonal antibody mediated targeting of alkylating agents for the treatment of cancer. J. D. Rodwell (ed.) In: Targeted Diagnosis and Therapy, Marcell Dekker, USA 1:123-156, 1988 **[1].**

3. **Smyth, M. J.**, Ortaldo, J. R., Shinkai, Y., Yagita, H., Nakata, M., Okumura, K., and Young, H. A.: Regulation of pore-forming protein gene expression in human peripheral blood leukocytes.

In: Oppenheim, J. J., Powanda, M. C., Kluger, M. J., and Dinarello, C. A. (Eds.) Molecular and Cellular Biology of Cytokines. Wiley-Liss, 529-534, 1990 **[n/a].**

4. **Smyth, M. J.**, and Ortaldo, J. R.: Molecular mechanisms of lymphocyte cytotoxicity. In: Cytotoxic Cells: Recognition, Effector Function, Generation, and Methods, Sitkovsky, M., and Henkart, P. (eds.)., p221-232, 1993 **[n/a].**

5. **Smyth, M. J.**: Granzyme M. In: Handbook of Proteolytic Enzymes Academic Press p85-87, 1998 **[3].**

6. **Smyth, M. J.**, Sutton, V. R., and Trapani, J. A.: Killer cells - deliverers of exogenous death proteases. In: Signalling Pathways in Apoptosis. p263-290, 1999 **[n/a].**

7. Ruefli A. A., **Smyth M.J.,** and Johnstone R.W. P-glycoprotein as a general anti-apoptotic protein. In "Encyclopedia of Cancer," 2nd edition (J. R. Bertino, ed.), pp. 433-441. Academic Press, San Diego (2002) **[n/a].**

8. **Smyth, M. J.**: Granzyme M. In: 2nd edition Handbook of Proteolytic Enzymes Academic Press p1554-1556 2004 **[n/a].**

9. Cretney, E., Street, S. E. A., and **Smyth, M. J.:** Tumor killing by natural killer cells. G. Weber (ed) In: Cancer Therapy: Molecular Targets in Tumor-Host Interactions. Horizon Scientific Press, USA, Chapter 14: 277-313, 2005 **[n/a].**

10. SLH van Dommelen, S. L. H., Godfrey, D. I., and **Smyth, M. J.:** Handbook of Dendritic Cells - Biologies, Diseases, and Therapies. Edited by MB Lutz, N Romani, and A Steinkasserer. Antigen Processing and Presentation: CD1d and NKT cells. Chapter 17 p313-342, 2006 **[n/a].**

11. **Smyth, M. J.**, Cretney, E., Street, S. E. A., and Hayakawa, Y.: Experimental models of cytokines and cancer prevention. M. T. Lotze and M. A. Caligiuri (eds) In: Cytokines in the Genesis and Treatment of Cancer. Humana Press, USA, p211-232, 2007 **[n/a].**

12. Davis, I. D., Skak, K., Hunder, N., **Smyth, M. J.,** and Sivakumar, P.: IL-21 and cancer therapy. In: Li S (Ed). Cancer Immune Therapy. Research Signpost (2009). Springer New York. ISBN 978-1-4419-0169-9 (Print) 978-1-4419-0170-5 (Online). DOI 10.1007/978-1-4419-0170-5 **[0].**

13. Mattarollo, S. R. and **Smyth, M. J.:** Mouse NKT cells: Animal Models. In Therapeutic Approaches Utilising NKT Cells. Springer Press Ed. M.Terabe and J. Berzofsky. (in press, 2012) **[1].**

14. Baschuk, N., **Smyth, M. J.,** and Andrews, D. M.: Granzyme M. In: 3rd Edition Handbook of Proteolytic Enzymes. Academic Press. Edited by Neil D. Rawlings and Guy Salvesen Chapter 601:2729-2731, 2012 **[n/a].**

15. Martinet, L. and **Smyth, M. J.:** Regulation of immune cell functions through nectin and nectin-like receptors. Encyclopedia of Immunobiology. Elsevier Press. Edited by Michael Ratcliffe. 2015 (in press).

Conference abstracts:

Conference papers/published abstracts - > 600 since 1997 at various national and international meetings.

Commentaries for the Lancet Oncology.

Patents:

PH 4085 “Melphalan Derivatives.”

PI 0803 “Compounds - Idarubicin - Antibody.”

PI 1994 “Antibody Conjugates and Tumour Necrosis Factor in Cancer Therapy.”

PI 2955 “Immunosuppression.”

US 07/990301, WO 94/12647 “Novel serine protease from lymphocyte granules and uses thereof.” (filed December 3rd, 1993). Co-inventor – Thomas J. Sayers. Granted in USA, Australia, Japan, Canada, UK and all major European countries. This patent covers the discovery and uses of a novel and unique serine protease that I cloned.

US Provisional 60/137993 “Cell for identifying potential therapeutics.” (filed June 7th, 1999, not continued).
PR7167 “Methods of inducing cell death and methods of treatment.” (filed August 21st,2000).

Provisional Application, "Methods and Compositions for Adoptive Immunotherapy"
reference date December 10, 2004.
PCT/AU2005/001873
Inventors: J.A. Trapani, **M.J. Smyth**, M.H. Kershaw, P.K. Darcy.

Provisional application, “Recombinant perforin, expression and uses thereof”
March 1, 2004, PCT phase commenced March 1, 2005.
Inventors: J.A. Trapani and **M.J. Smyth.**

Provisional Application, “A subset of immune cells and uses thereof.”
reference date May 10, 2005.
Inventors: Y. Hayakawa and **M.J. Smyth**

“Dihydrofuru[3,4-c]pyridin-3(1H)-ones, preparation and uses thereof”.
Provisional application August 1, 2008.
Inventors: JA Trapani**, MJ Smyth**, W Denny, J Spicer and G Lena

“Dihydrofuru[3,4-c]pyridin-3(1H)-ones as perforin inhibitors”
Provisional application August 1, 2008.
Inventors: JA Trapani, **MJ Smyth**, W Denny, J Spicer and G Lena

“Therapeutic compounds, their preparation and uses thereof”
Provisional application August 1, 2008.
Inventors: JA Trapani, **MJ Smyth**, W Denny, J Spicer and G Lena

“Cancer Diagnostic”
WO Patent 2,012,031,320, 2012
Australian Provisional 2010903995 filed 6/9/10
PCT application PCT/AU2011/001148 filed 6/9/11
Inventors: J Stagg, **MJ Smyth**, S Loi

Immunoreceptor modulation for treating cancer and viral infections
PCT Application No.: PCT/AU2013/001132, filed 03/10/13
Provisional application AU2013903189, filed 22/08/13
Inventor: **MJ Smyth**

Methods and products for preventing and/or treating metastatic cancer.
International Bureau of the World Intellectual Property Organization

2012903874
Inventors: S McColl, I Comerford, Y Harata Lee, **MJ Smyth**
Filed 06/09/2012

Translation into Practice

Anti-CTLA-4 and anti-RANK-L

Using the pre-clinical model of experimental melanoma metastases, we have now demonstrated that anti-CTLA-4 and anti-RANKL monoclonal antibodies (mAbs) have modest anti-metastatic activities alone, but considerably enhanced metastases suppression when combined together. The combination effect of anti-CTLA-4 and anti-RANKL was dependent upon lymphocytes. The use of denosumab for pain related to bony metastases in a few patients with metastatic melanoma who were receiving ipilimumab has offered a glimpse of the potential clinical utility of this combination. We have described a case of rapidly advancing metastatic melanoma with aggressive and symptomatic bone metastases requiring treatment with denosumab for palliation of bone pain (concomitantly treated with the anti-CTLA-4 antibody ipilimumab). The patient had a dramatic and durable response in excess of 12 months. Although clinical data is limited, we did not observed any evidence of enhanced toxicity from this combination.

Patients with unresectable stage III C or stage IV melanoma who are ipilimumab and denosumab naïve. Enrolment will be enriched for patients with tumor deposits that are readily amenable for serial tumor biopsies / excisions (eg: subcutaneous nodules and nodal disease).

Anti-PD-1 in breast cancer
Our mechanism of action studies in mice describe the role of host immunity (particularly type I and II interferons) and adaptive (CD8+ T cell immunity) post trastuzumab-like antibody (anti-Her2) treatment (P01061281, PNAS 2011 [55 cites]). In addition this study demonstrates for the first time the combinatorial benefit of anti-PD-1 and other T cell activating antibodies with trastuzumab and indicates the preferred scheduling. This work has been followed by our immune signature studies in human breast cancer (with Sherene Loi) and further mouse studies (recently submitted to JNCI). We have shown that tumor infiltrating lymphocytes (TILs) at diagnosis were significantly associated with decreased distant recurrence in TNBC and higher trastuzumab benefit in HER2+ disease., suggesting that trastuzumab can favorably alter the immune microenvironment. Trastuzumab response correlates with high tumor PD-1/PD-L1 expression and some other immunosuppressive pathways.

We have initiated PANACEA - anti-PD-1 monoclonAl aNtibody in AdvanCed, trastuzumab-resistant, HER2-positive breAst cancer. A phase Ib/II trial evaluating the efficacy of MK-3475 and trastuzumab in patients with trastuzumab-resistant, HER2-positive metastatic breast cancers. The first combination trial of a T cell checkpoint inhibitor of its kind. To be run by the INTERNATIONAL BREAST CANCER STUDY GROUP IBCSG 45-13/BIG 4-13 with patients treated in Europe and Australia. My role here is as Translational research Committee co-chair.

The major outcome is to change the thinking of oncologists involved in breast cancer treatment. Immunotherapy has taken a long time to get accepted by this group despite the potential mechanism of action of one the most effective therapies against Her2+ disease. Collectively, this work has been highlighted at the major San Antonio Breast Cancer Conference and companies like Merck and Genentech are making a significant investment in these types of approaches in women with breast cancer. Whether the anti-PD-1 and other immunotherapies add disease free and overall survival benefit will be uncovered by our trial and others that follow.

Anti-CTLA-4 and RT
In this study, we examined whether the antitumor effects of radiotherapy, in established triple-negative breast tumors (TNBC) could be enhanced with combinations of clinically relevant monoclonal antibodies (mAb), designed to stimulate T cell and macrophage immunity or relieve immunosuppression. Concomitant targeting of costimulatory molecules enhanced the antitumor effects of radiotherapy and promoted the rejection of subcutaneous and orthotopic TNBC tumors. All mice bearing established orthotopic TNBC tumors were cured with some combinations and single- or low-dose fractionated radiotherapy. CD8+ T cells were essential for curative responses to this combinatorial regime. Notably, radiotherapy did not deplete, but enriched tumors of functionally active, tumor-specific effector cells. Collectively, these data show that concomitant

targeting of immunostimulatory and inhibitory checkpoints with immunomodulatory mAbs can enhance the curative capacity of radiotherapy in established breast malignancy (P01557154, Cancer Res, 2012 [27 cites].

Our Cancer Research paper received great attention in the radiotherapy and oncology clinics at Peter Mac and was shared with our colleagues at Bristol Myers Squibb (BMS, USA). In 2013 a group of us led by Kathy Pope and Grant McArthur (Peter Mac) proposed a prospective trial (30 patients) examining safety and biological effects of combining Ipilimumab (anti-CTLA-4) and palliative radiotherapy for soft tissue disease in patients with metastatic stage IIIC or IV melanoma. The overall hypothesis based on our Cancer Research pre-clinical studies was that radiation-induced changes to tumor cells and the local microenvironment can enhance the systemic efficacy of the CTLA-4 inhibitor Ipilimumab. The secondary hypothesis was that CTLA-4 inhibition with Ipilimumab can enhance the local and abscopal anti-tumor effects of RT. This is an investigator-driven descriptive and exploratory study and my role now is as an Associate Investigator. BMS has supported the work with drug and funding for the trial and correlative science by BMS. Sites for the trial include Peter Mac, Princess Alexandra Hospital, Brisbane and Westmead Hospital, Sydney.

These are yet to be determined. The co-primary objectives are to establish a toxicity profile for patients receiving Ipilimumab in combination with palliative radiotherapy and to document tumor response in the irradiated index lesion, and assess the immune response in the index lesion and host (translational component). Secondary objective is to document overall tumor response, progression free survival and overall survival.

IL-23 in oncology
We have performed the most extensive set of analyses to define the carcinogenic potential of treating experimental animals with anti-IL-12p40 versus anti-IL-23p19 and discovered the risk of neutralizing IL-12p40 versus the benefit of IL-23p19 blockade (P01557162, P01608865).

The safety of use of anti-human IL-12p40/IL-23p19 antibodies for the treatment of psoriasis and inflammatory bowel syndrome has been a major concern for many companies developing these agents. Our work has significantly driven the development of anti-IL-23p19 due to its equivalent anti-inflammatory properties, but potential safer profile than anti-IL-12p40.

We have identified IL-23 as a very important pro-tumor factor in inflammatory carcinogenesis. The long-term safety data that emerge from the use of anti-IL-12p40 and eventually anti-IL-23p19 may be some of the most important immune surveillance data in humans ever generated. Thus the final outcome/benefit of our research may take another 5-10 or more years to realise. Patients are currently receiving anti-human IL-23 antibodies for Psoriasis and Crohns Disease. These data will be eventually compared with anti-IL-12p40 antibodies (Ustekinumab) where large patient data sets are maturing.

CD73 as a cancer target
We provided the first study describing the potential of CD73 as a target in cancer (P10041515 PNAS, 2010 [94 cites]). Using gene-expression data from over 6,000 breast cancer patients, we then reported that high CD73 expression was associated with a poor prognosis in triple-negative breast cancers (TNBC). Because anthracycline-based chemotherapy regimens are standard treatment for TNBC, we investigated the relationship between CD73 and anthracycline efficacy. In TNBC patients treated with anthracycline-only preoperative chemotherapy, high CD73 gene expression was significantly associated with a lower rate of pathological complete response or the disappearance of invasive tumor at surgery (P01608919, PNAS, 2013).

CD73 is now being seriously considered as a target for the treatment of TNBC. CD73hi is being used as biomarker for poor prognosis and selection of TNBC patients for immunotherapy. Further, partly as a result of our research (as above), TNBC are being treated actively with T cell based immunotherapy, in particular, anti-PD1 (MK3475). Considerably more pharmaceutical companies have become interested in CD73 as a target for cancer immunotherapy.

Outcome unknown, but to be determined in the next several years. Data concerning the treatment of TBNC with anti-PD-1 should soon become public.

Combination immunotherapies
In 2006, we described the concept of multiple steps to achieve successful tumor eradication in mice (immunogenic cell death, DC activation, enhanced T cell survival and function) using a three-antibody combination immunotherapy termed trimAb (P_5556520, Nature Medicine [161 cites]). This was the first study to show the synergistic anti-tumor effects of a multi-component and rational combination immunotherapy in any mouse model.

This work has driven many groups to explore combinations and attempt to rationalize the most important steps into the most simplistic dual combinations. Since 2009, these have included: a number of approaches combining chemotherapy or targeted therapies with immunotherapy (eg. cyclophosphamide and anti-OX40, gemcitabine and anti-CD40, imatinib and anti-CTLA-4); combinations of various antibodies that block T cell checkpoints (anti-CTLA-4, anti-PD-1, anti-LAG3, anti-TIM3; combinations of therapeutic antibodies (like rituximab and trastuzumab) with adjuvants (eg. anti-CD47, SIRP1α antagonists) that promote antibody dependent cellular cytotoxicity (ADCC) and antibody dependent cellular phagocytosis (ADCP). It is now obvious from both pre-clinical models and contemporary clinical trials that combination approaches may be required for optimally effective and broadly applicable cancer immunotherapy. Our work changed the mono-therapeutic approach that many pharmaceutical companies and oncologists were taking with immunotherapy up until 2006. Our work provided a framework in which to design new combinations.

Outcomes will flow dramatically in the next 5 years, but already the change in philosophy that our work brought about has resulted in the very rapid move to combination with two leading immunotherapies for cancer. In 2013, we see the rather remarkable clinical results of two lead T cell checkpoint antibodies, Ipilimumab (anti-CTLA-4) and Nivolumab (anti-PD-1), when combined against advanced malignant melanoma, with future promise for equally effective and potentially safer combination approaches across a broad spectrum of human cancers. This combination in phase Ib was published in the NEJM in 2013 and and intake for large multinational phase III trial has just been completed. This kind of rapid translation would have not been possible with the previous mindset about developing immunotherapies.

Subsets of NK cells
We discovered a novel way to subset mouse and human natural killer (NK) cells based on the expression of CD27 (P_5556453 cited 292 times; P_ 5556487). This subsets NK cells into 4 types with CD11b-CD27- (progenitor pool), CD11b-CD27+ (immature), CD11b+CD27+ (mature inflammatory) and CD11b+CD27- (mature, most terminally differentiated). This method is now used by most laboratories in the world doing NK cell research. We provisionally patented the method, but costs and lack significant uptake of the method in humans at that time saw us terminate before full specification.

Using CD27 as a marker of NK cell differentiation, laboratories now employ CD27/CD11b as standard markers with NKp46/NK1.1 and CD3/TCR to mark all NK cell subsets. In humans diagnostic assessment of NK cells has traditionally relied on CD56, CD16, and CD161 and CD3/TCR staining. This is still largely the practice, but the use of CD27 with CD11b in some human diseases like malaria is now being undertaken.

This discovery has allowed further dissection of NK cell function based on stage of differentiation and the effective mapping of transcription factors and molecules that control this lineage. As mouse NK cells lack CD56 or a distinct correlate, direct comparative studies of NK cells in mice and humans have been limited. This method now allows comparisons to be readily made.

Gene engineered T cells
My group was involved in the creation of new chimeric antibody receptors (CAR) for genetic engineering in T cells from 1994-2004. We established ground-breaking technology to produce T cells specific for a range of cancers through genetic modification. We have addressed limitations to this approach, by optimising cytotoxicity, T cell proliferation and in vivo persistence of adoptively transferred cells in mouse cancer models. We published a number of important papers including in BLOOD and derived a new patent on adoptive cellular therapy (ACT) concerning the composition of T cell mixtures for effective tumor control. We then partnered with Andrews Scott (Ludwig Institute) to use a fully humanized single chain [targeting the tumour-associated antigen Lewis-Y (LeY)] specific antibody to create a new CAR for therapy in a wide range

of cancers. The preclinical work for this construct was first published in 2005 (P_5556531, PNAS, 2005 [58 cites]) and follow up studies defined the safety and potential utility of this approach in humans (P_5556530, Gene Therapy, 2008; P_5556529, J Immunotherapy, 2009; P00724383, Gene Therapy, 2010).

The derivation of a new experimental therapy for the treatment of patients with high risk AML. This is the first human trial of CAR engineered T cells ever undertaken in Australia and assessed by the Therapeutic Goods Administration under the CTX scheme.

An initial phase I trial targeting in human AML, has just been completed and published (P01608913, Molecular Therapy, 2013). We examined the safety and postinfusion persistence of adoptively transferred T cells. Grade 3 or 4 toxicity was not observed. One patient achieved a cytogenetic remission whereas another with active leukemia had a reduction in peripheral blood (PB) blasts and a third showed a protracted remission. Using an aliquot of In111-labeled CAR T cells, we demonstrated trafficking to the bone marrow (BM) in those patients with the greatest clinical benefit. Furthermore, in a patient with leukemia cutis, CAR T cells infiltrated proven sites of disease. Serial PCR of PB and BM for the LeY transgene demonstrated that infused CAR T cells persisted for up to 10 months. Our study supports the feasibility and safety of CAR-T-cell therapy in high-risk AML, and demonstrates durable in vivo persistence.

We also developed NKG2D expressing CAR T cells and published in J. Biol. Chem in 2005. This attracted a lot of interest academically over the past 10 years and Ono Pharmaceutical are now developing Celyad's NKR-2 T-Cell cancer immunotherapy in Japan, South Korea, and Taiwan for a wide range of solid and hematological tumors—and potentially enable its development for other diseases. NKR-2 is a T-cell engineered to express the human NK receptor NKG2D, an activating receptor designed to trigger cell killing through the binding of NKG2D to any of eight ligands known to be overexpressed on more than 80% of tumors. Unlike traditional chimeric antigen receptor (CAR) T-cell therapy, which targets only one tumor antigen, NK cell receptors enable a single receptor to recognize multiple tumor antigens. NKR-2 is now the subject of a Phase I trial in acute myeloid leukemia and multiple myeloma patients. The trial is designed to assess the safety and feasibility of NKR-2, with secondary endpoints including clinical activity.