Curriculum Vitae

Barbara Fingleton

Office Address:	715CA PRB, Department of Cancer Biology, Vanderbilt University, 2220 Pierce Ave, Nashville, TN 37232
Office Phone Number:	(615) 936-5877

Education:

1988 - 1992:	BSc (Hons) in Biotechnology from Dublin City University, Dublin, Ireland
1992 - 1996:	Ph.D. from Dublin City University, Dublin, Ireland Title: EXPRESSION AND REGULATION OF MATRILYSIN IN HUMAN TUMOURS Mentor: Susan McDonnell. Ph.D.
1997 - 2001:	Postdoctoral Research Fellow, Department of Cell Biology, Vanderbilt University Medical Center Nashville, TN Mentor: Lynn M. Matrisian Ph.D.

Leadership Training:

2002	Aventis-sponsored Leadership Development Fellowship

Academic Appointments:

Oct '96- Apr '97:	Temporary Lecturer in the School of Biological Sciences, Dublin City University, Dublin, Ireland
2001-2002:	Research Instructor, Department of Cancer Biology, Vanderbilt University Medical Center, Nashville, TN.
2002-2006:	Research Assistant Professor, Department of Cancer Biology, Vanderbilt University Medical Center, Nashville, TN.
2006–2011:	Assistant Professor (Educator Track), Department of Cancer Biology, Vanderbilt University Medical Center
2006 – present:	Cancer Biology graduate program faculty
2011-2017:	Assistant Professor (Tenure Track), Department of Cancer Biology, Vanderbilt University
2017 (Oct)-present	Associate Professor (Tenured), Department of Pharmacology, Vanderbilt University
2017 (Oct)-present	Associate Professor, Department of Surgery, Vanderbilt University Medical Center

Professional Organizations:

American Association for Cancer Research (AACR)
Metastasis Research Society (MRS), Board Member and Secretary
American Gastroenterological Association (AGA)

American Association for Advancement of Science (AAAS)

Professional Activities:

Intramural

2007, 2010	Dept. of Cancer Biology/Host Tumor Interactions Retreat abstract judge
2009, 2014	Dept. of Cancer Biology/Host Tumor Interactions Retreat speaker judge
2010	Co-organizer, Cancer Biology 10-year Symposium [7 invited speakers]
2010 - present	Member of Interdisciplinary Graduate Program (IGP) Admissions Committee
2011 – present	Member of Cancer Biology departmental Graduate Executive Committee
2011	VMS Research Forum, abstract and speaker judge
2011, 2012, 2014	VUMC Postdoctoral Association Research Symposium poster judge
2012 - 2016	VICC retreat poster judge
2012 - 2014	Vanderbilt University DDRC Pilot and Feasibility grant reviewer
2012 - present	VUMC Internal (EDGE) review panel
2012 - present	Member of Institutional Biosafety Committee
2013 - 2014	VICC ACS-IRG grant review panel
2013 - present	Dept. of Cancer Biology/Host Tumor Interactions Retreat poster judge
2015	VICC GI SPORE pilot grant reviewer
2015 – present	DAC Barrier Users Committee
2015 - present	VMS Admissions CBBI interviewer
2016 – present	IMPACT advisor for IGP

Extramural

2003, 2006-09, 2011-14, 2016	*Ad hoc* Scientist Reviewer, US Army Medical Research and Materiel Command Breast Cancer Research Program Panels
2006	Raine Medical Research Foundation grant reviewer
2007	External Examiner: thesis defense of Patricia McGowan, St Vincent's Hospital and University College Dublin, Dublin, Ireland,
2007	Irish Health Research Board grant reviewer
2008	Austrian Science Fund grant reviewer
2008	Danish Cancer Society grant reviewer
2009 – 10	*Ad hoc* Scientist Reviewer, American Cancer Society Cell Structure and Metastasis Committee
2010, 2012, 2013	Belgian Foundation against Cancer grant reviewer
2011	National Science Foundation, *Ad hoc* grant reviewer

2011- 13	*Ad hoc* Abstract reviewer for AGA annual meeting (DDW)
2012-present	Governing Board Member, Metastasis Research Society
2013	Qatar National Research Fund grant reviewer
2013	External Examiner: thesis defense of Maeve Mullooly, St Vincent's Hospital and University College Dublin, Dublin, Ireland,
2013 – present	Member of Editorial Board, *Cancer Research*
2013, 2015	*Ad hoc* Scientist Reviewer, US Army Medical Research and Materiel Command Inflammatory Bowel Disease Panel
2014	German-Israeli Foundation for Scientific Research and Development grant reviewer
2014	Yorkshire Cancer Research grant reviewer
2014	US-Israel Binational Science Foundation grant reviewer
2014 – present	Secretary, Metastasis Research Society
2014 - 2017	Research Awards Panel Member, AGA Institute
2015 – present	Member of Editorial Board, *Clinical Cancer Research*
2016	*Ad hoc* Scientist Reviewer, Susan G. Komen Foundation
2016 - present	NIH study section, *Ad hoc* Reviewer ZRG1 BMCT-C Panel (6 sessions)
2017 – present	Member of Editorial Board, *Clinical and Experimental Metastasis*
2018	Ad hoc Scientist Reviewer, US Army Medical Research and Material Command Peer Reviewed Cancer Research Program reviewer

Journal Peer Review

American Journal of Pathology; American Journal of Physiology; British Journal of Cancer; Cancer Cell; Cancer Research; Carcinogenesis; Clinical Cancer Research; Clinical & Experimental Metastasis; Cellular & Molecular Gastroenterology and Hepatology; EMBO Journal; FASEB Journal; Gastroenterology; Genes & Development; International Journal of Cancer; Journal of Biological Chemistry; Journal of Clinical Investigation; Journal of Clinical Oncology; Journal of Pathology; Journal of Translational Medicine; Molecular Cancer Research; Molecular Cancer Therapeutics; Nature Communications; Nature Medicine; Neoplasia; New England Journal of Medicine; Oncogene; Oncotarget; PLoS One

Other Professional Activities

2003	Chair of Session 'MMPIs in cancer and infection', Gordon Research Conference on Matrix Metalloproteinases, Big Sky, Montana.
2003	Session leader 'Protease inhibitors: where should we intervene?', Nature Horizon Symposium "Signalling Scissors: New Perspectives on Proteases", Italy,
2003-4	Consulted for Biopharmacopae Design International
2004	Minisymposium Session Co-chair 'Proteases and tumor invasion', AACR 95th Annual Meeting, Orlando, Florida.

2005	Co-chair of Tumor Progression, Invasion and Metastasis Section of Tumor Biology Subcommittee of the AACR Annual Meeting Program Committee
2006	Consulted for Amgen
2007	Member of Scientific Review Committee for Sixth Annual AACR Frontiers in Cancer Prevention Research Conference
2010	Session Chair, 'Imaging Metastasis', Education Session, AACR Annual Meeting, Washington DC.
2010	Consulted for Dyax Pharmaceutical Corp.
2014	Session Chair, 'Regulation of metastasis by inflammation', MRS biennial congress, Heidelberg, Germany, July 2014.
2014-present	Consult for FutuRx Biotech Incubator/Accelerator (Israel)
2015	Consulted for Narrow River Management drug investment company
2016	Consulted for MEDAcorp
2016-present	Consult for MabTrix
2016	Session Chair, 'Non-coding RNAs and other regulators in metastasis', MRS biennial congress, Chengdu, China, September 2016.
2018	Member of program committee for AACR annual meeting 2018
2018	Discussion Leader. Gordon Research Conference on Proteolytic Enzymes and Their Inhibitors, Barga, Italy, June 2018.

Teaching Activities:

Graduate School Courses

2001- 2006:	Lecturer, Graduate Course in Cancer Biology. Course Directors: Dr Lynn M. Matrisian (2001-2004) and Dr Fiona Yull (2005-2006).
2006	Course Director "Current Topics in Cancer Biology: Inflammation and Cancer", 14 week, 2-credit course
2006	Assistant Course Director, Graduate Course in Cancer Biology, 16 week, 4-credit course.
2007	Co-Director for 2 Graduate Courses in Cancer Biology: Introduction to Cancer Biology (CANB340), a 15-week 2-credit course; and Advanced Cancer Biology (CANB342), a 16-week, 4-credit course
2008 - present	Course Director, Graduate Course in Advanced Cancer Biology (CANB8342), a 16-week, 4-credit course
2009, 2011	Lecturer, CBIO320. Course Director: Mark deCaestecker ;1 lecture/year
2012- present	Lecturer, CANB8340. Course Director: Fiona Yull; 1-2 lecture/year
2012 -13	Lecturer, CANB341. Course Directors: Alissa Weaver & Chris Janetopoulos; 1 lecture/year

2014 – present Lecturer, CANB8347. Course Director: Lourdes Estrada; 1 lecture/year

University Courses

2014 - present Lecturer, ChBE2150. Course Director: John Wilson; 1 lecture/year

Research Supervision

Thesis Students: Ashley Dozier (MLI 2013)
Andreia Bates (Ph.D. Cancer Biology 2015)
Katherine Venmar Bankaitis (Ph.D. Cancer Biology 2016); *recipient of NCI F31 graduate fellowship award*
Demond Williams (joined lab May 2017)

Postdoctoral Fellows: Miranda Hallett Ph.D. (current: Patent law trainee, Washington DC); *recipient of ACS post-doctoral fellowship award*
Sarah Daron-Mathis Ph.D. (joined lab September 2017)

Surgery Fellow: Felicitas Koller M.D. (current: Transplant surgeon, Northwestern University Hospital)

Medical Student: Anna Hinton (Lincoln Memorial University)
Nikita Dahake (Drexel University)

Undergraduates: Daniel Hwang (Vanderbilt)
Max Mam (Vanderbilt)
Michael Esantsi (Vanderbilt)
Sarenna Gillani (Emory)
Keyada Frye (Georgia State)
Stacey Thomas (TSU)
Angelica de Freitas (Sewanee)
Natasha Choudhury (Meharry)
Sarah Hagans (Marymount)
Lauren Laufer (Vanderbilt)
Daniel Valent (Vanderbilt)
Kunaal Mehrotra (Vanderbilt)

High School Students: Zhoobin Mohammedabidi
Chilesi Uriri

Ph.D. Thesis Committees: Mark Sinnamon (Ph.D. Cancer Biology 2008)
Sophie Thiolloy (Ph.D. Cancer Biology 2009)
Jessica Fowler (Ph.D. Cancer Biology 2010)
Luping Lin, *chair* (Ph.D. Cancer Biology 2011)
Nurudeen Lewis (Ph.D. Cancer Biology 2011)
Seth Ogden (Ph.D. Cancer Biology 2010)
Hailun Wang (Ph.D. Cancer Biology 2011)
Maria Abreu (Ph.D. Cancer Biology 2012)
Christina Garcia, *chair* (Ph.D. Cancer Biology 2011)
Amanda Hansen (Ph.D. Cancer Biology 2013)
Freddie Pruitt (Ph.D. Cancer Biology 2013)
Michael Pickup, *chair* (Ph.D. Cancer Biology 2013)

Caitlyn Barrett (PhD. Cancer Biology 2013)
Celestial Jones (*Transferred out of program 2014)*
Alisha Mendonsa (Ph.D. Cancer Biology 2014)
Ian McFadden (PhD. Interdisciplinary 2014)
Bobak Parang, *chair* (M.D. Ph.D. Cancer Biology 2015)
Vishruth Reddy, *chair* (M.D. Ph.D. Cancer Biology 2016)
Jamie Ausborn (Ph.D. Cancer Biology 2016)
Victoria Youngblood, *chair* (Ph.D. Cancer Biology 2016)
Christine Petersen (Ph.D. Cell Biology 2016)
Adam Bissonnette (*left program 2016*)
Allyson McLoed, *chair* (Ph.D. Cancer Biology 2016)
Kate Hebron, *chair* (Ph.D. Cancer Biology 2018)
Mary Lynn Dear (Ph.D. Biological Sciences 2018)
Casey Nielsen
Zach Sandusky, *chair*
Miranda Sowder
Eileen Shiuan
Jessica Jackson Abner
Joshua Thompson, *chair*
David Elion, *chair*
Shawna McLetchie,
Paula Marincola Smith
Evan Glass

Mentoring

2015 - present	Mentoring Committee, Naira Baregamian M.D. Assistant Professor of Surgical Oncology
2015 – 2017	Mentoring Committee, Tasia Brown Ph.D. Post-doctoral fellow in Beauchamp lab.

Research Program

Funding

Past

1. Agency/Award: VICC Pilot Project
   Start/End Dates: 9.1.1999 – 8.31.2000
   Project Title: *A novel assay to determine if the efficacy of MMP inhibitors is related to their assumed mechanism of action*
   Total Funding: $47,758
   Role: Co-investigator
   Percent effort: 20%

2. Agency/Award: NIH/NCI R01 CA60867
   Start/End Dates: 2002 - 2007
   Project Title: *The role of matrilysin in tumor progression*
   Total Funding: $250,000 Direct/year
   Role: Co-investigator
   Percent effort: 50%

3. Agency/Award: AIDS Malignancy Consortium/NIH Subcontract

Start/End Dates: 8.1.2003 – 7.31.2005
Project Title: *Laboratory correlative studies for clinical trial AMC306*
Total Funding: $16,813
Role: PI
Percent effort: 10%

4. Agency/Award: VICC Program Pilot Project
Start/End Dates: 12.1.2003 – 3.31.2005
Project Title: *NF-kB and matrix metalloproteinases at the host tumor interface in lung cancer*
Total Funding: $25,000
Role: PI
Percent effort: 20%

5. Agency/Award: VICC GI SPORE Pilot Project
Start/End Dates: 1.1.2005 – 12.31.2005
Project Title: *Roles of specific immune cell populations in the development of intestinal tumors*
Total Funding: $20,000
Role: PI
Percent effort: 25% (no salary allowed)

6. Agency/Award: DOD Breast Cancer Center of Excellence Subcontract
Start/End Dates: 2.1.2005 – 7.31.2006
Project Title: *The contribution of specific MMPs to tumor development and progression in a mouse model of breast cancer*
Total Funding: $75,000
Role: PI
Percent effort: 25%

7. Agency/Award: Susan G. Komen Foundation
Start/End Dates: 5.1.2006 – 4.30.2009 (N.C.E.)
Project Title: *The use of zoledronate to impact organ metastasis in breast cancer*
Total Funding: $250,000
Role: PI
Percent effort: 45%

8. Agency/Award: VUMC Discovery Program
Start/End Dates: 7.1.2007 – 6.30.2009
Project Title: *Role of proteinases in repair of colonic injury*
Total Funding: $100,000
Role: PI
Percent effort: 20%

9. Agency/Award: VICC Transition to Independence Award
Start/End Dates: 1.1.2008 – 12.31.2010
Project Title: None designated - Lab Start up funds
Total Funding: $100,000/year
Role: PI
Percent effort: 50%

10. Agency/Award: DOD Breast Cancer Concept Award
Start/End Dates: 9.1.2009 – 8.31.2010

Project Title: *Inhibition of Interleukin-4, a survival factor for breast cancer cells, as an anti-metastatic approach*
Total Funding: $72,500
Role: PI
Percent effort: 25%

11. Agency/Award: Dyax Corp Sponsored Research
Start/End Dates: 9.1.2009 – 4.30.2010
Project Title: *MMP2/9 inhibitory antibodies in colon tumor models*
Total Funding: $53,470
Role: PI
Percent effort: 10%

12. Agency/Award: VDDRC Pilot Project
Start/End Dates: 6.1.2010 – 5.31.2012
Project Title: *MMP10 regulates colonic wound repair*
Total Funding: $20,000
Role: PI
Percent effort: 7.5%

13. Agency/Award: NIH/NCI R01CA84360
Start/End Dates: 1/01/2010 -11/30/2015 (NCE)
Project Title: *Tumor and stromal MMPs in breast cancer*
Total Funding: $232,330 Direct/year
Role: PI (Matrisian PI until 1.1.2012, then transferred to Fingleton)
Percent effort: 35%

14. Agency/Award: NIH/NCI R01 CA157781
Start/End Dates: 7.1.2011 – 5.31.2017 (NCE)
Project Title: *Epithelial IL4Ralpha regulates colon tumor progression*
Total Funding: $207,500 Direct/year
Role: PI
Percent effort: 35%

15. Agency/Award: NIH/NIDDK R01 DK099204 (Williams PI)
Start/End Dates:4/1/2014 – 3/31/2019
Project Title: *Selenium in gastrointestinal inflammatory diseases*
Total Funding: $217,500 Direct/year
Role: Collaborator
Percent effort: 3%

Current

16. Agency/Award: DOD Breast Cancer Research Program Breakthrough Award
Start/End Dates: 8/1/2016-7/31/2019
Project Title: *Targeting the epithelial type II IL4 receptor in metastatic breast cancer.*
Total Funding: $250,000 Direct/year
Role: PI
Percent effort: 25%

17. Agency/Award: VI4/VICC Immuno-oncology Pilot
Start/End Dates: 7.15.2017 – 7.14.2018
Project Title: *The secretome profile of mesenteric lymph node metastasis and its influence on GI cancer progression*
Total Funding: $50,000
Role: Co-PI
Percent effort: no effort covered.

18. Agency/Award: Metavivor Main Research Grant (McIntyre PI)
Start/End Dates: 2.1.2018 – 1.31.2020
Project Title: *A novel self-reporting paclitaxel prodrug without systemic neurotoxicity: preclinical assessment for targeted treatment of metastatic breast cancer*
Total Funding: $100,000/year
Role: Co-Investigator/ VU subcontract PI
Percent effort: 5%

19. Agency/Award: DOD/CDMRP - PRCRP
Start/End Dates: 4/01/2018 – 03/31/2020
Project Title: "*Advancing the understanding of lymphatic metastasis in gastric and colorectal cancers*"
Total Funding: $200,000 Direct/year
Role: PI
Percent effort: 25%

Publications and Presentations:

Peer-reviewed publications

1) **Fingleton B** and McDonnell S (1997) Cytokine regulation of matrilysin gene expression. *Biochem Soc Trans* 25 155S

2) Crawford HC, **Fingleton B**, Rudolph-Owen LA, Heppner Goss KJ, Rubinfeld B, Polakis P and Matrisian LM (1999) The metalloproteinase matrilysin is a target of β-catenin transactivation in intestinal tumors. *Oncogene* 18 2883-2891.

3) Powell WC*, **Fingleton B***, Wilson CL, Boothby M and Matrisian LM (1999) The metalloproteinase matrilysin [MMP-7] proteolytically generates active soluble Fas ligand and potentiates epithelial cell apoptosis. *Curr Biol* 9 1441-1447 **denotes authors contributed equally to this paper*

4) Haro H, Crawford HC, **Fingleton B**, MacDougall JR, Shinomiya K, Spengler DM and Matrisian LM. (2000) Matrix metalloproteinase-3 –dependent generation of a macrophage chemoattractant in a model of herniated disc resorption. *J Clin Invest* 105 133-141

5) Haro H, Crawford HC, **Fingleton B**, Shinomiya K, Spengler DM and Matrisian LM. (2000) Matrix metalloproteinase-7-dependent release of tumor necrosis factor-α in a model of herniated disc resorption. *J Clin Invest.* 105 143-150

6) Noe V, **Fingleton B**, Jacobs K, Crawford H, Vermeulen S, Bruyneel E, Matrisian L and Mareel M. (2001) Release of an invasion promoter E-cadherin fragment by matrilysin and stromelysin-1. *J Cell Sci*. 114 111-118.

7) Crawford HC, **Fingleton B**, Gustavson MD, Kurpios N, Wagenaar RA, Hassell JA and Matrisian LM. (2001) The PEA3 subfamily of Ets transcription factors synergizes with beta-catenin-LEF-1 to activate matrilysin transcription in intestinal tumors. *Mol Cell Biol* 21 1370-1383.

8) **Fingleton B**, Vargo-Gogola T, Crawford HC and Matrisian LM. (2001) Matrilysin expression selects for cells with reduced sensitivity to apoptosis. *Neoplasia*, 3 459-468.

9) Vargo-Gogola T, **Fingleton B,** Crawford HC and Matrisian LM. (2002) Matrilysin (Matrix metalloproteinase-7) selects for apoptosis resistant mammary cells in vivo. *Cancer Res* 62 5559-5563.

10) Vargo-Gogola T, Crawford HC, **Fingleton B** and Matrisian LM. (2002) Identification of novel matrix metalloproteinase-7 (matrilysin) cleavage sites in murine and human Fas ligand. *Arch Biochem Biophys.* 408 155-161.

11) McIntyre JO, **Fingleton B**, Wells S, Lynch C and Matrisian LM. (2004) Development of a novel fluorogenic proteolytic beacon for in vivo detection and imaging of tumor-associated Matrix Metalloproteinase-7 activity. *Biochem J.* 377 617-628.

12) Hulboy D, Gautam S, **Fingleton B** and Matrisian LM. (2004) The influence of matrix metalloproteinase-7 on early mammary tumorigenesis in the multiple intestinal neoplasia mouse. *Oncol Rep*. 12 13-17.

13) Gustavson MD, Crawford HC, **Fingleton B** and Matrisian LM. (2004) Tcf binding sequence and position regulate beta-catenin and Lef-1 responsiveness. *Molecular Carcinogenesis* 41 125-139

14) Mohammed FF, Smookler DS, Taylor S, **Fingleton B**, Kassiri Z, Sanchez O, English J, Matrisian LM, Au B, Yeh W-C and Khokha R. (2004) Abnormal TNFα activity in *Timp-3-/-* mice leads to chronic hepatic inflammation and failure of liver regeneration. *Nature Genetics* 36 969-977.

15) Yang L, Debusk L, Fukuda K, **Fingleton B**, Jarvis-Green B, Matrisian LM, Carbone DP and Lin PC (2004) Expansion of myeloid immune suppressor Gr+/Cd11b+ cells in a tumor-bearing host directly promotes tumor angiogenesis. *Cancer Cell* 6 409-421.

16) **Fingleton B,** Menon, R, Carter KJ, Overstreet PD, Hachey DJ, Matrisian LM and McIntyre JO. (2004) Proteinase activity in murine and human saliva as a biomarker for proteinase inhibitor efficacy. *Clin Cancer Res* .10 7865-7874.

17) Harrell P, McCawley LJ, **Fingleton B**, McIntyre JO and Matrisian LM. (2005) Proliferative effects of apical, but not basal, Matrix Metalloproteinase-7 activity in polarized epithelial cells. *Exp Cell Res.*303 308-320.

18) Chen X, Su Y**, Fingleton B**, Acuff, H, Matrisian LM, Zent R and Pozzi, A. (2005) Increased plasma MMP-9 in integrin alpha1-null mice enhances lung metastasis of colon carcinoma cells. *Int J Cancer.*116 52-61

19) Lynch CC, Hikosaka A, Acuff HB, Martin MD, Kawai N, Singh RK, Vargo-Gogola TC, Begtrup JL, Peterson TE, **Fingleton B**, Shirai T, Matrisian LM and Futakuchi M. (2005) MMP-7 promotes prostate cancer induced osteolysis via the solubilization of RANKL. *Cancer Cell.* 7 485-496.

20) Chen X, Su Y, **Fingleton B,** Acuff H, Matrisian LM, Zent R, Pozzi A. (2005) An orthotopic model of lung cancer to analyze primary and metastatic NSCLC growth in integrin alpha-1-null mice. *Clin Exp Metastasis* 22 185-93.

21) Acuff HB, Carter KJ, **Fingleton B**, Gorden DL and Matrisian LM. (2006) Matrix metalloproteinase-9 from bone marrow-derived cells contributes to survival but not growth of tumor cells in the lung microenvironment. *Cancer Res* 66 259-66.

22) Acuff HB, Sinnamon M, **Fingleton B**, Boone B, Levy SE, Chen X, Pozzi A, Carbone DP, Schwartz DR, Moin K, Sloane BF and Matrisian LM. (2006) Analysis of host- and tumor-derived proteinases using a custom dual species microarray reveals a protective role for stromal MMP12 in non-small cell lung cancer *Cancer Res* 66 7968-7975.

23) **Fingleton B,** Powell WC, Crawford, HC, Couchman JR and Matrisian LM. (2007) A rat monoclonal antibody that recognizes pro- and active matrix metalloproteinase-7 indicates polarized expression in vivo. *Hybridoma* 26 22-7.

24) Gordon DL, **Fingleton B**, LePage M, Crawford HC and Matrisian LM. (2007) Stromal derived MMP-9 promotes the growth of colorectal metastases in the liver microenvironment. *Int J Cancer*. 121 495-500.

25) **Fingleton B**, Carter KJ and Matrisian LM. (2007) Absence of functional Fas ligand enhances intestinal tumorigenesis in Apc$^{Min/+}$ mice. *Cancer Res.* 67 4800-6.

26) Stathopoulos GT, Sherrill T, Han W, Sadikot, RT, Polosukhin VV, **Fingleton B** ,Yull FE, and Blackwell TS. (2008) Use of bioluminescent imaging to investigate the role of nuclear factor-kappaB in experimental non-small cell lung cancer metastasis. *Clin Exp Metastasis.* 25 43-51.

27) Schwartz DR, Moin K, Yao B, Matrisian LM, Coussens LM, Bugge TH, **Fingleton B**, Acuff HB, Sinnamon M, Nassar H, Platts A, Krawetz SA, Linebaugh BE and Sloane BF. (2007) Hu/Mu ProtIn oligonucleotide microarray: Dual-species array for profiling protease and protease inhibitor gene expression in tumors and their microenvironment. *Mol Cancer Res.* 5 443-54

28) Lynch CC, Vargo-Gogola T, Martin MD, **Fingleton B**, Crawford HC and Matrisian LM. (2007) Matrix metalloproteinase-7 mediates mammary epithelial cell tumorigenesis through the ErbB4 receptor. *Cancer Res.*67 6760-7.

29) LePage M, Dow WC, Melchior M, You Y, **Fingleton B**, Quarles CC, Gore JC, Matrisian LM and McIntyre JO. (2007) Non-invasive detection of matrix metalloproteinase activity in vivo using a novel MRI contrast agent with a solubility switch. *Molec Imaging.* 6 393-403.

30) Stathopoulos GT, Sherrill TP, Cheng D-S, Scoggins RM, Polosukhin VV, Connolly L, Yull FE, **Fingleton B** and Blackwell TS. (2007) Epithelial nuclear factor kappaB activation promotes urethane-induced lung carcinogenesis. *Proc Natl Acad Sci USA* 104 18514-9.

31) Stathopoulos GT, Sherrill T, Han W, Sadikot RT, Yull FE, Blackwell TS and **Fingleton B**. (2008) Host nuclear factor kappaB potentiates lung cancer metastasis. *Mol Cancer Res.* 6 364-71.

32) Sinnamon MJ, Carter KJ, Sims LP, LaFleur B, **Fingleton B** and Matrisian LM. (2008) A protective role for mast cells in intestinal tumorigenesis. *Carcinogenesis.* 29 880-6.

33) Martin MD, Carter KJ, Jean-Philippe SR, Chang M, Mobashery S, Thiolloy S, Lynch CC, Matrisian LM and **Fingleton B**. (2008) Effect of ablation or inhibition of stromal matrix metalloproteinase-9 on lung metastasis in a breast cancer model is dependent on genetic background. *Cancer Res*. 68 6251-9.

34) Martin MD, **Fingleton B,** Lynch CL, Wells S, McIntyre JO, Piston D and Matrisian LM. (2008) Establishment and quantitative imaging of a novel 3D lung organotypic model of mammary tumor outgrowth. *Clin Exp Metastasis* Sept 12 25 877-85.

35) Ogden SR, Wroblewski LE, Weydig C, Romero-Gallo J, O'Brien DP, Israel DA, Krishna US, **Fingleton B**, Reynolds AB, Wessler S, Peek RM Jr. (2008) p120 and Kaiso regulate Helicobacter pylori-induced expression of matrix metalloproteinase-7. *Mol Biol Cell.* 19 4110-21

36) Sinnamon MJ, Carter KJ, **Fingleton B** and Matrisian LM. (2008) MMP9 contributes to intestinal tumorigenesis in the ApcMin mouse. *Int J Exp Pathol.*.89 466-75.

37) Quarles CC, LePage M, Gorden DL, **Fingleton B,** Yankeelov TE, Price RR, Matrisian LM, Gore JC, and McIntyre JO. (2008) Functional colonography of Min mice using dark lumen dynamic contrast-enhanced MRI. *Magn Reson Med*. 60 718-26.

38) Ogden S, Noto J, Allen S, Patel D, Romero-Gallo J, Washington MK, **Fingleton B**, Israel D, Lewis ND, Wilson KT, Chaturvedi R, Zhao Z, Shyr Y and Peek R.(2010) Matrix metalloproteinase 7 and pre-malignant host responses in *Helicobacter pylori* infected mice. *Cancer Res* 70 30-5

39) Stathopoulos G, Sherrill TP, Karabela S, Kalomenidis I, Goleniewska K, Rousson C, Peebles RS, Yull FE, **Fingleton B** and Blackwell TS. (2010) Host-derived interleukin-5 promotes experimental lung adenocarcinoma-induced malignant pleural effusion. *Am J Respir Crit Care Med* 182 1273-81.

40) Koller FL, Hwang DG, Dozier EA and **Fingleton B**. (2010) Epithelial interleukin 4 receptor promotes colon tumor growth. *Carcinogenesis* 31 1010-7.

41) Lynch CC, Vargo-Gogola T, Matrisian LM and **Fingleton B.** (2010) Cleavage of E-cadherin by matrix metalloproteinase-7 promotes cellular proliferation in non-transformed cell lines. *J. Oncol* 2010 530745.

42) Koon HB, **Fingleton B**, Lee JY, Geyer JT, Cesarman E, Parise RA, Egorin MJ, Dezube BJ, Aboulafia D and Krown SE. (2011) Phase II AIDS Malignancy Consortium trial of topical halofuginone in AIDS-related Kaposi's sarcoma. *JAIDS*. 56 64-8

43) Barrett CW, **Fingleton B**, Williams A, Ning W, Fischer MA, Washington MK, Chaturvedi R, Wilson KT, Hiebert SW and Williams CS. (2011) MTGR1 is required for tumorigenesis in the murine AOM/DSS colitis-associated colon carcinoma model. *Cancer Res* 71 1302-1312.

44) Zaynagetdinov R, Stathopoulos GT, Sherrill TP, Cheng DS, McLeod AG, Ausborn JA, Polosukhin VV, Connolly L, Zhou W, **Fingleton B**, Peebles RS, Prince LS, Yull FE and Blackwell TS. (2012) Epithelial nuclear factor-kB signaling promotes lung carcinogenesis via recruitment of regulatory T lymphocytes. *Oncogene* 31 3164-76.

45) Thiolloy S, Edwards JR, **Fingleton B**, Rifkin DB, Matrisian LM and Lynch CL. (2012) An osteoblast-derived proteinase controls tumor cell survival via TGF-beta activation in the bone microenvironment. *PLOS One*. 7(1) e29862.

46) Koller FL, Dozier EA, Nam KT, Swee M, Birkland TS, Parks WC and **Fingleton B**. (2012) Lack of MMP10 exacerbates experimental colitis and promotes development of inflammation-associated colonic dysplasia. *Lab Investigation*. 92 1749-59.

47) Barrett CW, Smith JJ, Lu LC, Markham N, Stengel KR, Short SP, Zhang B, Hunt AA, **Fingleton BM**, Carnahan RH, Engle ME, Chen X, Beauchamp RD, Wilson KT, Hiebert SW,

Reynolds AB, and Williams CS (2012) Kaiso directs the transcriptional corepressor MTG16 to the Kaiso site in target promoters. *PLoS One* 7(12):e51205.

48) Auf dem Keller U, Prudova A, Eckhard U, **Fingleton B** and Overall CM. (2013) Systems-level analysis of proteolytic events in increased vascular permeability and complement activation in skin inflammation. *Science Signaling*. Jan 15;6(258):rs2.

49) Barrett CW, Singh K, Motley AK, Lintel MK, Matafonova E, Bradley AM, Ning W, Poindexter SV, Parang B, Reddy VK, Chaturvedi R, **Fingleton BM**, Washington MK, Wilson KT, Davies SS, Hill KE, Burk RF, and Williams CW (2013) Dietary selenium deficiency exacerbates DSS-induced epithelial injury and AOM/DSS-induced tumorigenesis. *PLoS One* 8(7):e67845

50) Barham W, Frump AL, Sherrill TP, Garcia CB, Saito-Diaz K, VanSaun MN, **Fingleton B**, Gleaves L, Horton D, Capecchi MR, Blackwell TS, Lee E, Yull, F, and Eid JE (2013) Targeting the Wnt pathway in synovial sarcoma models. *Cancer Discovery* 3 1286-301.

51) Petersen C, Weis VG, Nam KT, Sousa JF, **Fingleton B**, and Goldenring JR (2014) Macrophages are necessary for the development of Spasmolytic polypeptide expressing metaplasia (SPEM) following acute parietal cell loss. *Gastroenterology*. 146 1727-38.

52) Barrett CW, Motley AK, Lintel MK, Reddy VK, Bradley AM, Freeman T, Vallance J, Ning W, Parang B, Poindexter SV, **Fingleton B**, Washington MK, Wilson KT, Shroyer NF, Hill KE, Burk RF, and Williams CS (2015) Selenoprotein P loss promotes stemness, oxidative damage and inflammatory tumorigenesis. *J Clin Invest* 125 2646-60.

53) Zaynagetdinov R, Sherrill TP, Gleaves LA, McLoed AG, Saxon JA, Habermann AC, Connolly L, Dulek D, Peebles Jr RS, **Fingleton B**, Yull FE, Stathopoulos GT, and Blackwell TS (2015) Interleukin 5 facilitates lung metastasis by modulating the immune microenvironment. *Cancer Res.* 75 1624-34.

54) Venmar KT, Carter KJ, Hwang DG, Dozier EA, and **Fingleton B**. (2014) IL4 receptor IL4Ra regulates metastatic colonization by mammary tumors through multiple signaling pathways. *Cancer Res* 74 4329-40.

55) Bates AL, Pickup MT, Hallett MA, Dozier EA, Thomas S and **Fingleton B**. (2015) Stromal MMP2 regulates fibroblast activation and promotes the outgrowth of experimental metastases. *J Pathol* 235 773-83.

56) Venmar KT, Kimmel DW, Cliffel DE, and **Fingleton B**. (2015) IL4 Receptor alpha mediates enhanced glucose and glutamine metabolism to support breast cancer growth. *BBA-Molecular Cell Research*. 1853 1219-28

57) Mendonsa AM, VanSaun MN, Ustione A, Piston DW, **Fingleton BM** and Gorden DL. (2015) Host and tumor-derived MMP13 regulate extravasation and establishment of colorectal metastases in the liver. *Mol Cancer* 14 49-60.

58) Thompson JJ, Short SP, Parang B, Brown RE, Li C, Ng VH, Saito-Diaz K, Choksi YA, Washington MK, Smith JJ, **Fingleton B**, Brand T, Lee E, Coffey RJ and Williams CS. Blood vessel epicaridal substance (BVES) reduces LRP6 receptor and cytoplasmic b-catenin levels to modulate Wnt signaing and intestinal homeostasis. Carcinogenesis *In Press.*

59) Carter KJ, Dozier EA, Williams M and **Fingleton B**. Zoledronic acid administration reduces soft tissue metastasis in a mouse model of breast cancer, independent of MMP9 inhibition. *In preparation.*

60) Hallett MA, Bates AL, Venmar KT, Frye KB, Ngwa V and **Fingleton B**. Expression of IL4Ralpha determines function of IL13 in survival and chemoresistance of colon cancer cells. *In preparation*.

Peer-reviewed Review Articles

61) McDonnell S. and **Fingleton B**. (1993) Role of matrix metalloproteinases in invasion and metastasis. *Cytotechnology* 12 367-384

62) **Fingleton BM**, Heppner Goss KJ, Crawford HC and Matrisian LM (1999) Matrilysin in early stages of intestinal tumorigenesis. *APMIS* 107 102-110.

63) Nelson AR, **Fingleton B**, Rothenberg ML and Matrisian LM. (2000) The matrix metalloproteinases: Biologic activity and clinical implications. *J Clin Oncol.* 18 1135-1149

64) **Fingleton B** and Matrisian LM. (2001) Matrix metalloproteinases as targets for therapy in Kaposi's sarcoma. *Curr Opin Oncol*, 13 368-373.

65) Coussens LM, **Fingleton B** and Matrisian LM. (2002) Matrix metalloproteinase inhibitors and cancer: Trials and tribulations. *Science,* 295 2387-2392.

66) **Fingleton B**. (2003) Matrix metalloproteinase inhibitors for cancer therapy: the current situation and future prospects. *Expert Opin Ther Targets*, 7 385-397

67) **Fingleton B.** (2003) CMT-3. Collagenex. *Curr Opin Investig Drugs*, 4, 1460-1467.

68) **Fingleton B** and Coussens LM (2005) Host/tumor interactions influencing disease progression. *Drug Discovery Today: Disease Mechanisms.* 2 199-204.

69) **Fingleton B.** (2006) Matrix metalloproteinases: Roles in cancer and metastasis. *Front BioSci* .11 479-91.

70) **Fingleton B**. (2007) Matrix metalloproteinases as valid clinical targets. *Curr Pharm Design* 13 333-46.

71) **Fingleton B**. (2007) Molecular targets in Metastasis: Lessons from Genomic approaches. *Cancer Genomics and Proteomics*. 4 211-22.

72) **Fingleton B**. (2007) MMPs as therapeutic targets – still a viable option? *Semin Cell Dev Biol.*19 61-8.

73) Hallett MA, Venmar KT and **Fingleton B**.(2012) Cytokine stimulation of epithelial cancer cells: similar and divergent functions of IL4 and IL13. *Cancer Res*. 72 6338-43.

74) Venmar KT and **Fingleton B**. (2014) Lessons from immunology: IL4R directly promotes mammary tumor metastasis. *Oncoimmunology*. 3 e955373.

75) Shay G, Lynch CC and **Fingleton B**. (2015) Moving targets: Emerging roles for MMPs in Cancer Progression and Metastasis. *Matrix Biology* 44-46 200-6.

76) Bankaitis KV and **Fingleton B** (2015) Targeting IL4/IL4R for the treatment of epithelial cancer metastasis. *Clin Exp Metastasis*, 32 847-56.

77) **Fingleton B**. (2017) MMPs as regulators of inflammatory processes. *BBA-Molec Cell Res*. 1864 2036-2042.

78) Williams D and **Fingleton B**. Non-canonical roles for metabolic enzymes and intermediates in cancer metastasis. *Submitted*

Book Chapters and Invited Articles

79) **Fingleton B** and Matrisian LM. (2001) Matrix metalloproteinases in cancer. In: *Cancer Drug Discovery and Development: Matrix Metalloproteinase Inhibitors in Cancer Therapy*. Clendeninn NJ and Appelt K eds. Humana Press Inc, Totowa, NJ. pp 85-112

80) **Fingleton B.** and Crawford HC. (2004) Apoptotic responses common to cancer and inflammation. In: *Cancer and Inflammation*. Morgan D., Forssmann U and Nakada M. eds. Birkahuser Publishing, Basel, Switzerland.

81) **Fingleton B.** (2005) Learning from our mistakes: the translation of MMPIs from laboratory to clinical trial. In: *AACR Education Book*

82) **Fingleton B.** (2007) MMP inhibitor clinical trials – the past, present and future. In: *The Cancer Degradome – Proteases and Cancer Biology*. Edwards D., Sloane B., eds. Springer Publishing, New York, NY.

83) **Fingleton B.** and Lynch CC. (2009) Cancer in context – the importance of the tumor microenvironment. In: *Cell-Extracellular Matrix Interactions in Cancer.* Zent R and Pozzi A eds. Springer Publishing, New York, NY. Pp 43-63.

84) **Fingleton B.** (2009) Tissue-specific regulation of cancer development by immune cells and their mediators. In: *AACR Education Book.* Pp 149-152.

85) **Fingleton B**. and Lynch CL (2010) A new dress code for MMPs: cleavage optional. *Dev Cell* 18 1-2.

86) **Fingleton B.** (2010) Inflammatory proteinase slips into tumor cells. *Nat Med* 16 161-3.

87) **Fingleton B.** (2011) The role of matrix metalloproteinases in tumor invasion and metastasis. In: *Cancer Metastasis: Biologic Basis and Therapeutics.* Welch D., Lyden D. and Psaila B. eds. Cambridge University Press, New York, NY. Pp 183-190.

88) **Fingleton B** (2011) Matrix metalloproteinase-10/ Stromelysin-2. In: *Handbook of Proteolytic Enzymes.* Rawlings N and Salvesen G eds. Springer.

89) **Fingleton B**. (2014) Matrix metalloproteinases. In: *Encyclopedia of Cancer Therapeutic Targets*. Marshall JL ed. Springer Science and Business Media.

90) Sleeman JP, Bankaitis K, Borrellio L, Cox T, Lynch C, Zijlstra A, **Fingleton B**, Guzvic M, Anderson R and Neman J. (2017) Meeting Report: Metastasis Research Society – Chinese Tumor Metastasis Society Joint Conference on Metastasis. *Clin Exp Metastasis* 34 203-21

91) **Fingleton B.** (2017) Making cancer quiescent: SPDEF De-cycles beta-catenin. *Gastroenterology*. 153 10-12.

92) **Fingleton B,** Lange K, Caldwell B, Bankaitis KV on behalf of the Board of the Metastasis Research Society (2018) Perspective on the interpretation of research and translation to clinical care with therapy-associated metastatic breast cancer progression as an example. *Clin Exp Metastasis*. 34 443-447.

Invited Presentations

1. *Matrilysin expression reduces sensitivity to apoptosis in tumor cells*, 2nd Roche International Symposium on Cancer Research, Tokyo, Japan, Nov 2000.
2. *Apoptotic resistance in matrilysin-expressing tumor cells*, Gordon Research Conference on Matrix Metalloproteinases, Tuscany, Italy, May 2001.

3. *FasL shedding: Implications for cancer development*, Roche Pharmaceuticals, Penzburg, Germany, Nov 2001.
4. *MMP-7 and Fas Ligand in early tumor development*, COST meeting, Ayr, Scotland, December, 2001.
5. *Matrix metalloproteinase inhibitors on trial*, ISFP/IFRS meeting, Munich, Germany Sept 2002.
6. *Advances in Cancer Research: Contributions from the 'omics'*, Annual Dishman Memorial Lecture, Bethel College, McKenzie, Tennessee, April 2003.
7. *MMPs and MMPIs in Cancer*, Fargo Conference on Metalloproteinases, Fargo, North Dakota, May 2003.
8. *The clinical development of MMP inhibitors: A tale of enthusiasm, disappointment and new frontiers,* American Association for Cancer Research Annual Meeting, Washington D.C., July 2003.
9. *Loss of Fas Ligand enhances tumorigenesis in the Min mouse*, AACR Annual Meeting, Washington DC, July 2003.
10. *MMPIs in Cancer: Finding the Balance*, Gordon Research Conference on Matrix Metalloproteinases, Big Sky, Montana, Aug 2003.
11. *Assaying MMP and MMPI activity in vivo,* U54 Interdisciplinary Research Team for Molecular Target Assessment Meeting, Boston, Massachusetts, Nov 2003.
12. *MMP9 but not MMP7 is required for lung metastasis in the MMTV-polyoma model of mammary tumor progression,* 10th International Congress of the Metastasis Research Society, Genoa, Italy, Sept. 2004.
13. *Learning from our mistakes: the translation of MMPIs from laboratory to clinical trial*. American Association for Cancer Research Annual Meeting, Anaheim CA, April 2005.
14. *Exploring MMP function in multistage mammary tumorigenesis.* European Molecular Biology Organization Conference on Common Molecular Mechanisms of Mammary Gland Development and Breast Cancer Progression, Dublin, Ireland, June 2006.
15. *Matrix metalloproteinases in breast cancer progression.* Era of Hope Meeting, Baltimore MD, June 2008.
16. *MMP9, a context-dependent regulator of breast cancer metastasis.* Dept of Pharmacology Seminar Series. Wayne State University, Detroit, MI. Jan 2009.
17. *Tissue-specific roles for inflammatory cells and their mediators*. AACR Annual Meeting, Denver, CO. April 2009.
18. *A protective role for MMP10 in ulcerative colitis.* Gordon Research Conference on Matrix Metalloproteinases, Les Diablerets, Switzerland, Sept 2009.
19. *Epithelial Interleukin-4 receptor is a key mediator of murine colon tumorigenesis.* Digestive Disease Week, New Orleans, LA. May 2010.
20. *A protective role for MMP10 in intestinal inflammation.* Matrix metalloproteinase Mini-symposium, Vanderbilt University Medical Center, Nashville, TN. April 2011.
21. *IL4 and IL13 as regulators of tumor behavior.* Dept of Cell & Developmental Biology Seminar Series, Oregon Health Sciences University, Portland, OR, February 2013.

22. *Cytokine Control of Tumor Behavior*, Dept of Biochemistry Seminar Series, University of Tennessee Health Science Center, Memphis, TN, April 2015.
23. *Tumor-promoting roles of the epithelial IL4 receptor,* Basic Science Grand Rounds, The Moffitt Cancer Center and Research Institute, Tampa, FL, Nov 2016.
24. *Tumor and metastasis-promoting roles of the epithelial IL4 receptor,* The University of Arizona, Tuscon, AZ, Nov 2016.
25. *The IL4 receptor as a tumor promoter*, Medical College of Wisconsin, Milwaukee, WI. Jan 2017.
26. *A perplexing target: opposing functions of MMP10 in colon cancer,* Gordon Research Conference on Matrix Metalloproteinases, University of New England, Biddeford, ME July 2017.
27. *MMP10 in colon cancer development and progression: a tale of two cell types.* 10th General Meeting of the International Proteolysis Society, Banff, Alberta, Canada. Oct. 2017.
28. *Elucidating roles for MMPs in metastatic cancers.* Symposium to honor Dr. Bonnie Sloane, Wayne State University, Detroit, MI. Nov. 2017.