

Curriculum vitae

Personal Particular

Name CHAN, Wing Yan Michael (陳永恩)
Gender Male
Date of Birth April 26, 1969
Birth place Hong Kong
Nationality Hong Kong, China

Correspondence Address Room 443, Department of Biomedical Sciences,
National Chung Cheng University,
Min Hsiung, Chia-Yi 621,
Taiwan ROC

Telephone Office: +(886) 5-2722176 ext 66510
Lab: +(886) 5-2722176 ext 61522
Fax: +(886) 5-2722871

Email biowyc@ccu.edu.tw; chanmwy@gmail.com



Academic qualification

<u>Date</u>	<u>Institute</u>	<u>Major</u>	<u>Degree</u>
9/1999- 11/2002	The Chinese University of Hong Kong, Hong Kong Mentor: Dr. Ka-Fai To	Anatomical and Cellular Pathology	Ph.D.
9/1992- 6/1995	Tunghai University, Taiwan, ROC Mentor: Dr. Vivian C. Yang	Biology	Master of Science (M.S.)
9/1988- 6/1992	Tunghai University, Taiwan, ROC	Biology	Bachelor of Science (B.S.)

Working Experience

Date	Institute/Company	Post
8/2017-present	Department of Biomedical Sciences, National Chung Cheng University, Min-Hsiung, Chia-Yi, Taiwan	Professor
8/2016-7/2017	Department of Life Science, National Chung Cheng University, Min-Hsiung, Chia-Yi, Taiwan	Professor
2/2016-present	Environmental Hygiene and Safety Center, National Chung Cheng University, Min-Hsiung, Chia-Yi, Taiwan	Group leader
8/2012-7/2016	Department of Life Science, National Chung Cheng University, Min-Hsiung, Chia-Yi, Taiwan	Associate Professor
8/2007-7/2012	Department of Life Science, National Chung Cheng University, Min-Hsiung, Chia-Yi, Taiwan	Assistant Professor
9/2004- 6/2007	Division of Human Cancer Genetics, Comprehensive Cancer Center, The Ohio State University, Columbus, Ohio, USA Mentor: Dr. Tim H.-M. Huang	Post Doctoral Researcher
11/2002- 8/2004	Department of Medicine and Therapeutics, CUHK, Hong Kong Mentor: Dr. Francis K.L. Chan	Post Doctoral Fellow
1/1997- 8/1999	Department of Biology, HKUST, Hong Kong	Teaching Assistant
4/1995- 8/1996	Chaplain Office, Tunghai University, Taiwan	Administrative Assistant
9/1992- 6/1993	Department of Biology, Tunghai University, Taiwan	Teaching Assistant

Awards

Year	Award	Location
2011	Distinguish Lecturer for General Education	National Chung Cheng University, Taiwan
2009	Young Scholar Award	National Chung Cheng University, Taiwan
2006	AACR-Aflac Inc., Scholar-in-Training award	97th AACR annual meeting, Washington DC, USA
2002	Sir Edward Youde Memorial Fellowship	Hong Kong
2001	AACR Ito-En Inc., Scholar-in-Training award	92nd AACR annual meeting , New Orleans, USA
2000	Taipei Trade Center Scholarship	CUHK, Hong Kong
1996	Taipei Trade Center Scholarship	HKUST, Hong Kong
1989,1991,1992, 1994	The Oversea Chinese Affairs Commission Scholarship	Tunghai University, Taiwan

Oral Presentation and Invited talks

- 2017/9/30 Invited Speaker, International Session, 76th annual meeting of the Japanese Cancer Association, Yokohama, Japan
- 2017/7/21 Invited speaker, National Chung Cheng University-Mahidol University Joint symposium on Biomedical Sciences and Beyond, Mahidol University, Bangkok, Thailand
- 2017/7/20 Invited speaker, Bioscience and Biotechnology for Promoting Health and Beauty Joint Symposium and Workshop, Assumption University, Bangkok, Thailand
- 2017/7/17 Invited speaker, Faculty of Medicine, Chulalongkorn University, Bangkok, Thailand
- 2016/7/21 Invited speaker, Mini-symposium on Cancer Epigenomics, The Chinese University of Hong Kong, Hong Kong
- 2016/6/16 Keynote speaker, Workshop on Cancer Biology and Signaling, Chulalongkorn University, Bangkok, Thailand
- 2015/4/23 Invited Speaker, Molecular Medicine Seminar, UTHSCSA, San Antonio, Texas, USA
- 2014/10/10 Invited Speaker, Institute of Digestive Disease, The Chinese University of Hong Kong, Hong Kong
- 2014/11/19 Invited Speaker, Symposium on Epigenetics in Developmental Biology and Cancer Research, Kaohsiung, Taiwan
- 2014/5/1 Invited Speaker, TIGP Bioinformatics, Academia Sinica, Taiwan
- 2012/11/14 Invited Speaker, Institute of Oral Biology, National Yang Ming University, Taiwan
- 2011/11/4 Invited Speaker, Institute of Signal Transduction, National Cheng-Kung University, Taiwan
- 2010/12/18 Instructor, Tutorial on Epigenomics and Cancer, IEEE BIBM 2010, Hong Kong
- 2010/8/7 Invited Speaker, Advances in Targeted Therapy – From Bench to Bedside, Da Lin Tzu Chi General Hospital, Da Lin, Taiwan
- 2009/8/19 Invited Speaker, Biology Summer Camp, Taiwan
- 2009/6/19 Invited Speaker, Institute of Signal Transduction, National Cheng-Kung University, Taiwan
- 2008/4/25 Invited Speaker, Tzu Chi General Hospital, Hua-Lien, Taiwan
- 2001/3/27 Poster Discussion, 2001 AACR annual meeting, New Orleans

Teaching Experience

- **CCU: Graduate course:** Advanced Cell Biology, Epigenomics, Cancer Biology, Biomedical application of high-throughput technology; **Undergraduate course:** Signal Transduction, Genomics, Cell Biology; **Multi-disciplinary:** General Biology, Evolution and Creation, Jewish custom and Life science
- **OSU:** Tutor, Mathematical Bioscience Institute (MBI) summer course 2005

Mentorship

Postdoctoral fellow

Jian Liang Chou (2014-now)

Ph.D. student:

Victor Chan (2002-2004, CUHK); Victoria Cheng (2003-2004, CUHK); Enrica Fabbri (2005-2006, OSU); Daniel E. Deatherage (2007, OSU); Jian-Liang Chou (周建良, 2007-2013, CCU); Hon-Yi Lin (林宏益, 2009-2014, CCU); Jia-Min Yeh (葉佳銘, 2010-2015, CCU); Chi-Chen Lu (呂啟禎, 2011-2016, CCU), Hsiao-Yen Hsiao(謝小燕, 2010-2016, CCU), Frank Cheng (鄭學澤, 2013-now, CCU), Jora Lin (林孟儒, 2014-2017, CCU), Mita Tran (2017-now, CCU)

Master student:

Hui-Wen Yang (楊惠雯, 2008-2009, CCU); Liang-Yu Chang(張良裕, 2008-2011, CCU); Ming-Hsuan Tsai(蔡明軒, 2008-2010, CCU); Gary CW Chen(陳玠璋, 2009-2011, CCU); Lin-Yu Chen (陳林鈺 2009-2011, CCU); 孫煥廷 (2009-2011, CCU); Li-Han Zeng (曾莉涵, 2010-2013, CCU); Ting-Chuan Zeng (曾挺銓, 2011-2013, CCU); Frank Cheng(鄭學澤, 2011-2013, CCU); Jacqueline Shay (2012-2014, CCU); Jora Lin (林孟儒, 2012-2014, CCU); Wen-Yu Huang(黃雯宇, 2012-2014, CCU), 陳似姍 (2013-2015, CCU), 黃詩媛 (2015-2017, CCU), 陳胤甄 (2015-2017, CCU), 紀承霖 (2015-2017, CCU), 葉智傑 (2016-now, CCU), 林靖雯 (2016-now, CCU)

Undergraduate:

陳玠璋 (2008-2009, CCU); Lin-Yu Chen (2008-2009, CCU); 孫煥廷 (2008-2009, CCU); 郭時鈺 (2009-2010, CCU); 黃博駿 (2009-2010, CCU); 顏恩澤 (2009-2010, CCU); 劉佳好(2010-2011, CCU); 鄧洧婷 (2010-2011, CCU); 黃明祥(2010-2011, CCU); 王傑瑩 (2010-2012, CCU); 方詠淳 (2010-2011, CCU); 吳東臻(2010-2011, CCU); 麥淑媛 (2012-2013, CCU); 劉一萱 (2012-2013, CCU); 王怡婷 (2012-2013, CCU); 李偉全 (2013-2014, CCU), 莊育銘 (2015-now, CCU)

Membership

- Active Member, American Association for Cancer Research (AACR) since 2008
- Active Member, Japanese Cancer Association (JCA) since 2016

Editorial Board Member

- Epigenetic Diagnosis & Therapy
- Frontiers in Cell and Developmental Biology

- Frontiers in Genetics

Journal Reviewer

- BMC medical Genomics
- Cancer
- Cancer Letter
- Cancer Research
- Clinical Epigenetics
- Genome Research
- Gut
- International Journal of Cancer
- Oncogene
- Oncotarget

Grant

As PI

2017/8/01-2018/7/31

Ministry of Science and Technology, Taiwan: The mechanistic role of Di(2-ethylhexyl)phthalate in aberrant epigenetic alterations in mammalian cell. (MOST 106-2314-B-194-002-, NT\$1,200,000)

2017/5/01-2020/4/20

European Research Area (ERA)-CVD Joint Transnational Project: Early detection and prevention of cardiac dysfunction and heart failure induced by chemotherapeutics (MOST 106-2923-B-194-001-MY3, NT\$8,320,000)

2015/08/01-2018/07/31

Ministry of Science and Technology, Taiwan: Mechanism and Efficacy of Cyproheptadine as an Anti-Bladder Cancer Agent. (MOST 104-2314-B-705-002 - MY3, NT\$ 3,340,000)

2015/08/01-2016/07/31

Ministry of Science and Technology, Taiwan: A study of bimodal epigenetic control of miR-193a and its clinical implication in ovarian cancer. (MOST 104-2320-B-194-

003, NT\$1,200,000)

2014/08/01-2015/07/31

Ministry of Science and Technology, Taiwan: The role of EZH2 as an epigenetic switch of the TGF-beta targets in regulating EMT and its therapeutic implication in ovarian cancer. (MOST 103-2320-B-194-002, NT\$1,190,000)

2013/08/01-2014/07/31

National Science Council, Taiwan: A study of the dual epigenetic dysregulations of the TGF-beta regulated tumor suppressive miR-193a in ovarian cancer and its translational application in cancer therapy (NSC102-2320-B-194-006, NT\$1,295,000)

2012/08/01-2013/07/31

National Science Council, Taiwan: A study of the role of TGF-beta/SMAD signaling in epigenetic dysregulation of its target gene in regulating EMT and its translational application in targeted therapy of ovarian cancer (NSC101-2320-B-194-003, NT\$1,100,000)

2011/08/01-2012/07/31

National Science Council, Taiwan: Functional characterization of an epigenetically-silenced SMAD4 target, RunX1T1 in ovarian cancer and its implication in non-invasive diagnosis of cancer patients (NSC100-2320-B-194-002, NT\$640,000)

2008/08/01-2011/07/31

National Science Council, Taiwan: A study of epigenetic effect of *H. pylori* CagA-mediated STAT3 activation in gastric cancer (NSC97-2320-B-194-002-MY3, NT\$4,410,000)

2007/11/01-2008/07/31

National Science Council, Taiwan: Epigenetic alteration of STAT3-targeted gene in gastric cancer (NSC96-2314-B-194-002, NT\$ 600,000)

As co-PI

2010/08/01-2011/07/31

National Science Council, Taiwan: A Study of molecular mechanism of cancer invasion and its clinical implication in urothelial cancer. (NSC99-2321-B-194-001, NT\$8,500,000)

2008/08/01-2011/07/31

National Science Council, Taiwan: Elucidate the mechanism of Na-K-2Cl cotransporter in traumatic brain injury-induced brain edema. (NSC97-2320-B-415-006- MY3, NT\$2,565,000)

2003-2004

Direct Grant, The Chinese University of Hong Kong (PI: Dr. KF To) SOCS-1 hypermethylation in gastric cancer, intestinal metaplasia and tumor suppressor effect of SOCS-1 in gastric cancer

2004-2005

Direct Grant, The Chinese University of Hong Kong (PI: Dr. WK Leung)
Targeted inhibition of cyclooxygenase-2 by RNA interference in gastric cancer cells:
Implications on therapy and chemoprevention

Publication

■ Book Chapter

1. Lin HY, Huang TH, [Chan MW](#). Aberrant Epigenetic Modifications in Radiation-Resistant Head and Neck Cancers. **Cancer Epigenetics, Methods in Molecular Biology**, 1238:321-32, 2015.
2. [Chan MW](#), Peng Z, Weber JC, Li YW, Zuzolo MT, and Lin HJ. Methods of global epigenomic profiling. Chapter 22, *in* Sahu SC, eds., **Toxicology and Epigenetics**. John Wiley & Sons Press, New Jersey, 2012.
3. Nephew K, Balch C, Huang THM, Shu Z, [Chan MW](#), and Yan PS. Epigenetics in Cancer stem cell development. Chapter 10, *in* Bapat S, eds., **Cancer stem cells: Identification and Targets**. John Wiley & Sons Press, New Jersey, 2009
4. Shiraishi M, [Chan MW](#) and Huang THM. Microarray analysis of DNA methylation targets identified by Methyl-CpG binding protein. Chapter 6, *in* Esteller M, eds., **DNA Methylation: Approaches and Applications**. CRC Press, Florida. 2004.

■ Journal Paper

1. Hsieh HY, Jou YC, Tung CL, Tsai YS, Wang YH, Chi CL, Lin RI, Hung SK, Chuang YM, Wu SF, Li C, Shen CH, [Chan MW](#), Hsu CD. Epigenetic silencing of the dual-role signal mediator, ANGPTL4 in tumor tissues and its overexpression in the urothelial carcinoma microenvironment. *Oncogene* 37:673-686, 2018.
2. Wang CM, Chang CB, [Chan MW](#), Wen ZH, Wu SF. Dust mite allergen-specific immunotherapy increases IL4 DNA methylation and induces Der p-specific T cell tolerance in children with allergic asthma. *Cellular & Molecular Immunology* 2017 (Epub ahead of print).
3. Williams M, Jin HC, [Chan MW](#), Chu WT, Grusch M, Cheng YY. DNA Methylation as a Noninvasive Epigenetic Biomarker for the Detection of Cancer.

Disease Markers 2017: 3726595, 2017

4. Hung SK, Chen YC, Chiou WY, Lai CL, Lee MS, Lo YC, Chen LC, Huang LW, Chien NC, Li SC, Liu DW, Hsu FC, Tsai SJ, [Chan MW](#), Lin HY. Irradiation enhanced risks of hospitalised pneumonopathy in lung cancer patients: a population-based surgical cohort study. *BMJ Open* 7:e015022, 2017
5. Song EJ, [Chan MW](#), Shin JW, Chen CC. Hard clam extracts induce atypical apoptosis in human gastric cancer cells. *Experimental and Therapeutic Medicine*. 14:1409-1418, 2017.
6. Chen KW, Chang YJ, Yeh CM, Lian YL, [Chan MW](#), Kao CF, Chen L. SH2B1 modulates chromatin state and MyoD occupancy to enhance expressions of myogenic genes. *Biochimica et Biophysica Acta - Gene Regulatory Mechanisms*, 1860:270-281, 2017.
7. Wu CS, Wei KL, Chou JL, Lu CK, Hsieh CC, Lin JM, Deng YF, Hsu WT, Wang HM, Leung CH, Ma DL, Li C and [Chan MW*](#). Aberrant JAK/STAT signaling suppresses TFF1 and TFF2 through epigenetic silencing of GATA6 in gastric cancer. *International Journal of Molecular Sciences*, 17:1467, 2016.
8. Lin HY and [Chan MW*](#). Genetic and epigenetic alterations in urothelial carcinoma. *Translational Cancer Research*, 5:S1192-95, 2016.
9. Yeh CM, Chang LY, Lin SH, Chou JL, Hsieh, HY, Zeng LH, Chuang SY, Wang HW, Dittner C, Lin CY, Lin JM, Huang YT, Ng EK, Chang AS, Wu SF, Lin J, Yeh KT and [Chan MW*](#). Epigenetic silencing of the *NR4A3* tumor suppressor, by aberrant JAK/STAT signaling, predicts prognosis in gastric cancer. *Scientific Reports* 6:31690, 2016.
10. Bai AH, Wu WK, Xu L, Wong SH, Go MY, Chan AW, Harbord M, Zhang S, Chen M, Wu JC, [Chan MW](#), Chan MT, Chan FK, Sung JJ, Yu J, Cheng AS, Ng SC. Dysregulated Lysine Acetyltransferase 2B Promotes Inflammatory Bowel Disease Pathogenesis Through Transcriptional Repression of Interleukin-10. *Journal of Crohn's and Colitis* 10:726-34, 2016.
11. Jin Y, Tang S, Li W, Ng SC, [Chan MW](#), Sung JJ, Yu J. Hemolytic *E. coli* promotes colonic tumorigenesis in females. *Cancer Research* 76:2891-900, 2016.

12. Yang W, Mok MT, Li MS, Kang W, Wang H, Chan AW, Chou JL, Chen J, Ng EK, To KF, Yu J, [Chan MW](#), Chan FK, Sung JJ, Cheng AS. Epigenetic silencing of GDF1 disrupts SMAD signaling to reinforce gastric cancer development. *Oncogene* 35:2133-44, 2016.
13. Lu CC, Shen CH, Chang CB, Hsieh HY, Wu JD, Tseng LH, Hwang DW, Chen SY, Wu SF, [Chan MW*](#), Hsu CD. Guizhi Fuling Wan as a novel agent for intravesical treatment for bladder cancer in mouse model. *Molecular Medicine* 22:64-73, 2016.
14. Hsieh HY, Shen CH, Lin RI, Feng YM, Huang SY, Wang YH, Wu SF, Hsu CD, and [Chan MW*](#). Cyproheptadine exhibits antitumor activity in urothelial carcinoma cells by targeting GSK3 β to suppress mTOR and β -catenin signaling pathways. *Cancer Letters* 370:56-65, 2016.
15. Aguda BD, del Rosario RC, [Chan MW](#). Oncogene-tumor suppressor gene feedback interactions and their control. *Mathematical Biosciences and Engineering* 12:1277-88, 2015
16. Yeh CM, Chen PC, Hsieh HY, Jou YC, Lin CT, Tsai MH, Huang WY, Wang YT, Lin RI, Chen SS, Tung CL, Wu SF, Chang DC, Shen CH, Hsu CD, and [Chan MW*](#). Methylomics analysis identifies ZNF671 as an epigenetically repressed novel tumor suppressor and a potential non-invasive biomarker for the detection of urothelial carcinoma. *Oncotarget* 6:29555-72, 2015.
17. Fang CY, Shen CH, Wang M, Chen PL, [Chan MW](#), Hsu PH, Chang D. Global profiling of histone modifications in the polyomavirus BK virion minichromosome. *Virology* 483:1-12, 2015.
18. Li YF, Hsiao YH, Lai YH, Chen YC, Chen YJ, Chou JL, [Chan MW](#), Lin YH, Tsou YA, Tsai MH, and Tai CK. DNA methylation profiles and biomarkers of oral squamous cell carcinoma. *Epigenetics* 10:229-36, 2015
19. Chou JL, Huang RL, Shay J, Chen LY, Lin SJ, Yan PS, Chao WT, Lai YH, Lai YL, Chao TK, Lee CI, Tai CK, Wu SF, Nephew KP, Huang TH, Lai HC*, and [Chan MW*](#). Hypermethylation of the TGF- β target, ABCA1 is associated with poor prognosis in ovarian cancer patients. *Clinical Epigenetics* 7:1, 2015

20. Lin HY, Hung SK, Lee MS, Chiou WY, Huang TT, Tseng CE, Shih LY, Lin RI, Lin JM, Lai YH, Chang CB, Hsu FC, Chen LC, Tsai SJ, Su YC, Li SC, Lai HC, Hsu WL, Liu DW, Tai CK, Wu SF, [Chan MW*](#). DNA methylome analysis identifies epigenetic silencing of FHIT as a determining factor for radiosensitivity in oral cancer: an outcome-predicting and treatment-implicating study. *Oncotarget* 6:915-34, 2015.
21. Cheng FH, Aguda BD, Tsai JC, Kochańczyk M, Lin MJ, Chen GC, Lai HC, Nephew KP, Hwang TW, [Chan MW*](#). A mathematical model of bimodal epigenetic control of miR-193a in ovarian cancer stem cells. *PLOS ONE* 9:e116050, 2014
22. Hsu MM, Huang PY, Lee YC, Fang YC, [Chan MW](#), Lee CI. FT-IR microspectrometry reveals epigenomic effect on epithelial ovarian cancer. *International Journal of Molecular Sciences* 15:17963-73, 2014.
23. Lu KT, Huang TC, Wang JY, You YS, Chou JL, [Chan MW](#), Wo PY, Amstislavskaya TG, Tikhonova MA, Yang YL. NKCC1 mediates traumatic brain injury-induced hippocampal neurogenesis through CREB phosphorylation and HIF-1 α expression. *Pflugers Archiv : European Journal of Physiology* 2014 (on line)
24. Lai YH, He RY, Chou JL, [Chan MW](#), Li YF and Tai CK. Promoter hypermethylation and silencing of tissue factor pathway inhibitor-2 in oral squamous cell carcinoma. *Journal of Translational Medicine* 12:237, 2014.
25. Yeh CM, Shay J, Zeng TC, Chou JL, Huang TH, Lai HC, and [Chan MW*](#). Epigenetic silencing of ARNTL, a circadian gene and potential tumor suppressor in ovarian cancer. *International Journal of Oncology* 45:2101-7, 2014
26. [Chan MW](#), Chang CB, Tung CH, Sun J, Suen JL, Wu SF*. Low-dose 5-aza-2'-deoxycytidine pretreatment inhibits experimental autoimmune encephalomyelitis by induction of regulatory T cells. *Molecular Medicine* 20:248-256, 2014.
27. Wang HH, Wu MM, [Chan MW](#), Pu YS, Chen CJ, Lee TC*. Long-term low-dose exposure of human urothelial cells to sodium arsenite activates lipocalin-2 via promoter hypomethylation. *Archives of Toxicology* 88:1549-59, 2014.

28. Lai NS, Chou JL, Chen GC, Liu SQ, Lu MC, [Chan MW*](#). Association between cytoines and methylation of SOCS-1 in serum of patients with ankylosing spondylitis. *Molecular Biology Reports* 41: 3773-80, 2014.
29. Liao YP, Chen LY, Huang RL, Su PH, [Chan MW](#), Chang CC, Yu MH, Wang PH, Yen MS, Nephew KP, Lai HC*. Hypomethylation signature of tumor-initiating cells predicts poor prognosis of ovarian cancer patients. *Human Molecular Genetics*. 23:1894-906, 2014.
30. Tseng KC, Chou JL, Huang HB, Tseng CW, Wu SF, [Chan MW*](#). SOCS-1 Promoter Methylation and Treatment Response in Chronic Hepatitis C Patients Receiving Pegylated-Interferon/Ribavirin. *Journal of Clinical Immunology*. 33:1110-6, 2013.
31. Lu CC, Lin MY, Chen SY, Shen CH, Chen LG, Hsieh HY, [Chan MW*](#), Hsu CD*. The investigation of a traditional chinese medicine, Guizhi Fuling Wan (GFW) as an Intravesical therapeutic agent for urothelial carcinoma of the bladder. *BMC Complementary and Alternative Medicine* 13:44, 2013 (* co-correspondence author)
32. Lin HY, Huang TT, Lee MS, Hung SK, Lin RI, Tseng CE, Chang SM, Chiou WY, Hsu FC, Hsu WL, Liu DW, Su YC, Li SC, [Chan MW*](#). Unexpected Close Surgical Margin in Resected Buccal Cancer: Very Close Margin and DAPK Promoter Hypermethylation Predict Poor Clinical Outcomes. *Oral Oncology* 49:336-44, 2013
33. Cheng AS, Li MS, Kang W, Cheng VY, Chou JL, Lau SS, Go MY, Lee CC, Ling TK, Ng EK, Yu J, Huang TH, To KF, [Chan MW](#), Sung JJ, Chan FK. Helicobacter pylori causes epigenetic dysregulation of FOXD3 to promote gastric carcinogenesis. *Gastroenterology* 144:122-133, 2013
34. Su PH, Lin YW, Huang RL, Liao YP, Lee HY, Wang HC, Chao TK, Chen CK, [Chan MW](#), Chu TY, Yu MH, Lai HC. Epigenetic silencing of PTPRR activates MAPK signaling, promotes metastasis and serves as a biomarker of invasive cervical cancer. *Oncogene* 3:15-26, 2013
35. Rodriguez BA, Frankhouser D, Murphy M, Trimarchi M, Tam HH, Curfman J,

- Huang R, [Chan MW](#), Lai HC, Parikh D, Ball B, Schwind S, Blum W, Marcucci G, Yan P, Bundschuh R. Methods for high-throughput MethylCap-Seq data analysis. *BMC Genomics* 13:S14, 2012
36. Peng Z, Weber JC, Han Z, Shen R, Zhou W, Scott JR, [Chan MW](#), Lin HJ. Dichotomy effects of AKT signaling in breast cancer. *Molecular Cancer* 11:61, 2012
37. Yo YT, Lin YW, Wang YC, Balch C, Huang RL, [Chan MW](#), Sytwu HK, Chen CK, Chang CC, Nephew KP, Huang TH, Yu MH, Lai HC. Growth Inhibition of ovarian tumor-initiating cells by niclosamide. *Molecular Cancer Therapeutics* 11:1703-12, 2012
38. Shen CH, Wu JD, Hsu CD, Jou YC, Lin CT, Wang M, Wu SF, [Chan MW](#), Chiang MK, Fang CY, and Chang D. The high incidence of JC virus infection in urothelial carcinoma tissue in Taiwan. *Journal of Medical Virology* 83:2191-9, 2011
39. Chang CF, Wang M, Fang CY, Chen PL, Wu SF, [Chan MW*](#) and Chang DC*. Analysis of DNA methylation in human BK virus. *Virus Genes* 43:201-7, 2011 (*Co-correspondence author)
40. Kennedy BA, Deatherage DE, Gu F, Tang B, [Chan MW](#), Nephew KP, Huang TH, Jin VX. ChIP-seq Defined Genome-Wide Map of TGF β /SMAD4 Targets: Implications with Clinical Outcome of Ovarian Cancer. *PLoS ONE* 6:e22606, 2011
41. Chen PC, Tsai MH, Yip SK, Jou YC, Ng CF, Chen Y, Wang X, Huang W, Tung CL, Chen GC, Huang MM, Tong JH, Song EJ, Chang DC, Hsu CD, To KF, Shen CH, [Chan MW*](#). Distinct DNA methylation epigenotypes in bladder cancer from different Chinese sub-populations and its implication in cancer detection using voided urine. *BMC Med Genomics* 4:45, 2011
42. Yeh KT, Chen TH, Yang HW, Chou JL, Chen LY, Yeh CM, Chen YH, Lin RI, Su HY, Chen GC, Deatherage DE, Huang YW, Yan PS, Lin HJ, Nephew KP, Huang TH, Lai HC, [Chan MW*](#). Aberrant TGF β /SMAD4 signaling contributes to epigenetic silencing of a putative tumor suppressor, RunX1T1 in ovarian cancer. *Epigenetics* 6:727-739, 2011

43. Chou JL, Chen LY, Lai HC, and [Chan MW*](#). TGF- β : friend or foe? The role of TGF- β /SMAD signaling in epigenetic silencing of ovarian cancer and its implication in epigenetic therapy. *Expert Opinion on Therapeutic Targets* 14:1213-23, 2010.
44. Shen CH, Hsieh HY, Wang YH, Chen SY, Tung CL, Wu JD, Lin CT, [Chan MW](#), Hsu CD, Chang DC. High Dickkopf-1 expression is associated with poor prognosis in patients with advanced urothelial carcinoma. *Experimental and Therapeutic Medicine* 1:893-898, 2010.
45. Tong JH, Ng, DC, Chau SL, So KK, Leung PP, Lee TL, Lung RW, [Chan MW](#), Chan AW, Lo KW and To KF. Putative tumor-suppressor gene DAB2 is frequently down regulated by promoter hypermethylation in nasopharyngeal carcinoma. *BMC Cancer* 10:253, 2010
46. Chou JL, Su HY, Chen LY, Liao YP, Hartman-Frey C, Lai YH, Yang HW, Deatherage DE, Kuo CT, Huang YW, Yan PS, Hsiao SH, Tai CK, Lin HJ, Davuluri RV, Chao TK, Nephew KP, Huang THM, Lai HC and [Chan MW*](#). Promoter hypermethylation of *FBXO32*, a novel TGF- β /SMAD4 target gene and tumor suppressor, is associated with poor prognosis in human ovarian cancer. *Laboratory Investigation* 90:414-425, 2010
47. Torng PL, Lin CW, [Chan MW](#), Yang HW, Huang SC, and Lin CT. Promoter Methylation of IGFBP-3 and p53 Expression in Ovarian Endometrioid Carcinoma. *Molecular Cancer* 8:120, 2009
48. Huang YW, Jansen RA, Fabbri E, Potter D, Liyanarachchi S, [Chan MW](#), Liu JC, Crijns APG, Brown R, Nephew KP, Van Der Zee AGJ, Cohn D, Yan PS, Huang THM, and Lin HJ. Identification of candidate epigenetic biomarkers for ovarian cancer detection. *Oncology Report* 22:853-861, 2009
49. Qin H*, [Chan MW*](#), Liyanarachchi S, Balch C, Potter D, Souriraj IJ, Cheng ASL, Agosto-Perez FJ, Nikonova EV, Yan PS, Lin HJ, Nephew KP, Saltz JH, Showe LC, Huang THM, and Davuluri RV. An integrative ChIP-Chip and gene expression profiling to model SMAD regulatory modules. *BMC Systems Biology* 3:73, 2009 (* equal contribution)

50. [Chan MW*](#), Hu AB, Yip SK, Ng CF, Lo KW, Tong JHM, Chan AWH, Chueng HY, Wong WS, Chan PSF, Lai FMM, and To KF. Progressive increase of genetic alteration in urinary bladder cancer by combined allelotyping analysis and comparative genomic hybridization. *International Journal of Oncology* 34: 963-70, 2009. (*Correspondence author)
51. Studebaker AW, Storci G, Werbeck JL, Sansone P, Sasser AK, Tavolari S, Huang T, [Chan MW](#), Marini FC, Rosol TJ, Bonafe M, and Hall BM. Fibroblasts isolated from common sites of breast cancer metastasis enhance cancer cell growth rates and invasiveness in an interleukin-6-dependent manner. *Cancer Research* 68: 9087-9095, 2008
52. [Chan MW](#), Huang YW, Hartman-Frey C, Kuo CT, Deatherage D, Qin H, Cheng ASL, Yan PS, Davuluri RV, Huang THM, Nephew KP, and Lin HJ. Aberrant Transforming Growth Factor-beta 1 Signaling and SMAD4 Nuclear Internalization Confer Epigenetic Repression of *ADAM19* in Ovarian Cancer. *Neoplasia* 10:908-19, 2008
53. Zhang S, Balch C, [Chan MW](#), Lai HC, Matei D, Schilder JM, Yan PS, Huang THM and Nephew KP. Identification and Characterization of Ovarian Cancer-Initiating Cells from Primary Human Tumors. *Cancer Research* 68:4311-20, 2008
54. Lai HC, Lin YW, Huang THM, Yan P, Huang RL, Wang HC, Liu J, [Chan MW](#), Chu TY, Sun CA, Chang CC and Yu MH. Identification of novel DNA methylation markers in cervical cancer. *International Journal of Cancer* 123: 161-167, 2008
55. Cheng AS, Culhane AC, [Chan MW](#), Venkataramu CR, Ehrich M, Nasir A, Rodriguez BA, Liu J, Yan PS, Quackenbush J, Nephew KP, Yeatman TJ, Huang THM. Epithelial progeny of estrogen-exposed breast progenitor cells display a cancer-like methylome. *Cancer Research* 68:1786-96, 2008
56. [Chan MW](#), Wong CY, Cheng AS, Chan VY, Chan KK, To KF, Chan FL, Sung JY and Leung WK. Targeted inhibition of COX-2 expression by RNA interference suppresses tumor growth and potentiates chemosensitivity to cisplatin in human gastric cancer cells. *Oncology Report* 18:1557-62, 2007

57. Zuo T, Wang L, Morrison C, Chang X, Zhang H, Li W, Liu Y, Wang Y, Liu X, [Chan MW](#), Liu JQ, Love R, Liu CG, Godfrey V, Shen R, Huang THM, Yang T, Park BK, Wang CY, Zheng P and Liu Y. FOXP3 is an X-linked breast cancer suppressor gene and an important repressor of the HER-2/ErbB2 oncogene. *Cell* 129: 1275-86, 2007.
58. Leung WK, To KF, Man EP, [Chan MW](#), Hui AJ, NG SS, Lau JY and Sung JJY. Detection of hypermethylated DNA or cyclooxygenase-2 messenger RNA in fecal samples of patients with colorectal cancer or polyps. *American Journal of Gastroenterology* 102:1070-6, 2007.
59. Cheng AS, Jin VX, Fan M, Smith LT, Liyanarachchi S, Yan PS, Leu YW, [Chan MW](#), Plass C, Nephew KP, Davuluri RV, and Huang THM. Combinatorial analysis of transcription factor partners reveals recruitment of c-MYC to estrogen receptor α - responsive promoters. *Molecular Cell* 21:393-404, 2006.
60. [Chan MW](#), Wei SH, Wen P, Wang Z, Matei DE, Liu JC, Liyanarachchi S, Brown R, Nephew KP, Yan PS, and Huang THM. Hypermethylation of 18S and 28S Ribosomal DNA predicts progression-free survival in patients with ovarian cancer. *Clinical Cancer Research* 11:7376-83, 2005
61. Leung WK, To KF, Man EP, [Chan MW](#), Bai AH, Hui AJ, Chan FKL, and Sung JJY. Quantitative detection of promoter hypermethylation in multiple genes in the serum of patients with colorectal cancer. *American Journal of Gastroenterology* 100:2274-9, 2005
62. Leung WK, To KF, Chu ES, [Chan MW](#), Bai AHC, EG EK, Chan FKL, and Sung JJY. Potential diagnostic and prognostic values of detecting promoter hypermethylation in the serum of patients with gastric cancer. *British Journal of Cancer* 92:2190-4, 2005
63. [Chan MW](#), Chan, VYW, Leung WK, Chan KK, To KF, Sung JJY, and Chan FKL. Anti-sense Trefoil Factor Family-3 (Intestinal Trefoil Factor) inhibits cell growth and induces chemosensitivity in human gastric cancer cells. *Life Science* 76:2581-92, 2005.
64. Chan VY, [Chan MW](#), Leung WK, Leung PS, Sung JJ, Chan FK. Intestinal trefoil factor promotes invasion in non-tumorigenic Rat-2 fibroblast cell.

Regulatory Peptide 127: 87-94, 2005.

65. Leung WK, To KF, Man EPS, [Chan MW](#), Bai AHC, Hui AJ, Chan FKL, Lee JFY, and Sung JJY. Detection of epigenetic changes in Fecal DNA as a molecular screening test for colorectal cancer: a feasibility study. *Clinical Chemistry* 11:2179-82, 2004
66. Chan AWH, [Chan MW](#), Lee TL, Ng EKW, Leung WK, Lau JYW, Tong JHM, Chan FKL, and To KF. Promoter hypermethylation of death associated protein kinase (DAPK) gene associated with advanced stage gastric cancer. *Oncology Report* 13:937-41, 2004.
67. To KF, [Chan MW](#), Leung WK, Ng EKW, Yu J, Bai AHC, Lo AWI, Chu SH, Tong JHM, Lo KW, Sung JJY, and Chan FKL. Constitutional activation of IL-6 mediated JAK/STAT pathway through hypermethylation of SOCS-1 in human gastric cancer cell line. *British Journal of Cancer* 91:1335-41, 2004 .
68. [Chan MW](#), Chu ESH, To KF, and Leung WK. Quantitative detection of methylated SOCS-1, a tumor suppressor gene, by a modified protocol of quantitative real time methylation-specific PCR using SYBR green and its use in early gastric cancer detection. *Biotechnology Letters* 26:1289-93, 2004
69. Bai AHC, Tong JHM, To KF, [Chan MW](#), Man EPS, Lo WK, Lee JFY, Sung JJY and Leung WK. Promoter hypermethylation of tumor related genes in the progression of colorectal neoplasia. *International Journal of Cancer* 112:846-53, 2004
70. Leung WK, Bai AHC, Chan VYW, Yu J, [Chan MW](#), To KF, Chan KK, Chan FKL, Fu YG, Wu JR, and Sung JJY. Effect of peroxisome proliferators-activated receptor γ ligands on growth and gene expression profiles of gastric cancer cells. *Gut* 53:1-338, 2004.
71. Leung WK, Yu J, Bai AHC, [Chan MW](#), Chan KK, To KF, Chan FKL, Ng EKW, Chung SSC, and Sung JJY. Inactivation of Helicase-Like Transcription Factor by promoter hypermethylation in human gastric cancer. *Molecular Carcinogenesis* 37:91-97, 2003.
72. Yu MMY, Tong JHM, Chan PKS, Lee TL, [Chan MW](#), Lo KW, and To KF.

Promoter hypermethylation of *RASSF1A* is common in cervical cancers and can be detected in cervical intraepithelial neoplasia. *International Journal of Cancer* 105: 204-209, 2003.

73. Yu, J, Leung WK, Ebert MPA, Leong RWL, Tse PCH, [Chan MW](#), Bai AHC, To KF, Malfertheiner P, and Sung JJY. Absence of Cyclin D2 expression is associated with promoter hypermethylation in gastric cancer. *British Journal of Cancer* 88:1560-1565, 2003.
74. [Chan MW](#), Chan LW, Tang NLS, Lo KW, Tong JHM, Cheung HY, Wong WS, Chan PSF, Lai FMM, and To KF. Frequent Hypermethylation of Promoter Region of *RASSF1A* in Tumor Tissues and Voided Urine of Urinary Bladder Cancer Patients. *International Journal of Cancer* 104:611-616, 2003.
75. To KF, Leung WK, Lee TL, Yu J, Tong JHM, [Chan MW](#), Ng EKW, Chung SSC, and Sung JJY. Promoter hypermethylation of tumor-related genes in gastric intestinal metaplasia of patients with and without gastric cancer. *International Journal of Cancer* 102:623-628, 2002.
76. Tong JHM, Tsang RKY, Lo KW, Woo JKS, Kwong J, [Chan MW](#), Chang AR, van Hasselt CA, Huang DP, and To KF. Quantitative Epstein-Barr virus DNA analysis and detection of gene promoter hypermethylation in nasopharyngeal brushing samples from patients with nasopharyngeal carcinoma. *Clinical Cancer Research* 8:2612-9, 2002.
77. Lee TL, Leung WK, [Chan MW](#), Ng EKW, Tong JHM, Lo KW, Chung SSC, Sung JJY, and To KF. Detection of Gene promoter hypermethylation in the tumor and serum of patients with gastric carcinoma. *Clinical Cancer Research* 8:1761-1766, 2002.
78. Leung WK, Yu J, Chan FKL, To KF, [Chan MW](#), Ebert MPA, Ng EKW, Chung SSC, Malfertheiner P, and Sung JJY. Expression of trefoil peptides (TFF1, TFF2, and TFF3) in gastric carcinomas, intestinal metaplasia, and non-neoplastic gastric tissues. *Journal of Pathology* 197:582-588, 2002.
79. [Chan MW](#), Chan LW, Tang NLS, Lee TL, Tong JHM, Lo KW, Cheung HY, Wong WS, Chan PSF, Lai FMM, and To KF. Hypermethylation of multiple genes

in tumor tissues and voided urine in urinary bladder cancer patients. *Clinical Cancer Research* 8: 464-470, 2002.

80. To KF, [Chan MW](#), Leung WK, Lee TL, Tong JHM, Sung JJY. Alterations of frizzled (FzE3) and Secreted Frizzled Related Protein (hsFRP) Expression in Gastric Cancer. *Life Science* 70:483-489, 2001.
81. [Chan MW](#), Chiang CD, Song EJ and Yang VC. Effects of cytoskeletal inhibitors on the accumulations of vincristine in a resistant human lung cancer cell line with high level of polymerized tubulin. *Cancer Biochemistry Biophysics* 16:347-363, 1998.

■ Conference Abstract

1. Lin CW, Chen YC, Cheng FH, Lin RI, Chang CB, Chuang YM, Lin HY, Huang RL, Lai HC, Ma X, Wu SF, Chan MW. Overexpression of E2F6 suppresses DC maturation through epigenetic silencing of miR-193a in ovarian cancer *in* The 76th Annual Meeting of the Japanese Cancer Association. Yokohama, Japan. 2017.
2. Yeh CC, Huang SY, Chang CB, Cheng FH, Hsieh, HY, Lin RI, Chen PC, Tseng MJ, Wu SF, [Chan MW](#) Cyprohepatine as a novel epigenetic modifier in the reexpression of NK cell receptor ligand, ULBP2 in bladder cancer *in* The 76th Annual Meeting of the Japanese Cancer Association. Yokohama, Japan. 2017.
3. Chou JL, Wu CS, Wei KL, Yan PS, Li C, [Chan MW](#). Hypermethylation of miR-193a by STAT3 signaling lead to tumorigenesis through overexpression of YWHAZ in gastric cancer *in* The 76th Annual Meeting of the Japanese Cancer Association. Yokohama, Japan. 2017.
4. Cheng FH, Chen YC, Lin RI, Lin JM, Chen GC, Chang CB, Chuang YM, Cheng AS, Wu SF, Lai HC, Lin HY, [Chan MW](#). Epigenetic silencing of miR193a and E2F6 ceRNA-mediated inhibition suppress anti-tumor immune response in ovarian cancer *in* The 76th Annual Meeting of the Japanese Cancer Association. Yokohama, Japan. 2017.
5. Chuang YM, Lin JM, Chou JL, Hung SJ, Yan PS, Liu TL, [Chan MW](#). Global methylomic analysis identifies the role of STAT3 in mediating epigenetic reprogramming in gastric cancer *in* The 76th Annual Meeting of the Japanese Cancer Association. Yokohama, Japan. 2017.
6. [Chan MW](#), Hsiao-Yen Hsieh, Yeong-Chin Jou, Chun-Liang Tung, Yuan-Hung Wang, Chen-Lin Chi, Ru-Inn Lin, Shu-Fen Wu, Cheng-Huang Shen, Cheng-Da Hsu. Epigenetic silencing of the dual-role signal mediator, ANGPTL4 in tumor tissues and its overexpression in the urothelial carcinoma microenvironment *in* Gordon Research Conferences: Cancer Genetics and Epigenetics. Lucca, Italy 2017
7. [Chan MW](#), Yeh CM, Chang LY, Lin SH, Lin CY, Chou JL, Huang YT, Ng EK, Cheng AS, Wu SF, Lin J, and Yeh KT. Aberrant JAK/STAT signaling confers

- epigenetic silencing of NR4A3 in gastric cancer *in* The 75th Annual Meeting of the Japanese Cancer Association. Yokohama, Japan. 2016. ([Oral Presentation](#))
8. Cheng FC, Aguda BD, Lin HY, Tsai JC, Kochanczyk M, Lin RI, Lin JM, Chen GC, Lai HC, Cheng AS, Hwang TW, and [Chan MW](#). Combined ceRNA and epigenetic silencing of miR193a lead to bistable switching of KIT in ovarian cancer *in* The 75th Annual Meeting of the Japanese Cancer Association. Yokohama, Japan. 2016. ([Oral Presentation](#))
 9. Lin JM, Chou JL, Lin HY, Yan PS, Lai HC, and [Chan MW](#). The prediction value of the expression signature of EZH2/SMAD4 targets on the survival of ovarian cancer patients *in* The 75th Annual Meeting of the Japanese Cancer Association. Yokohama, Japan. 2016. ([Oral Presentation](#))
 10. Lin MJ, Chou JL, Frankhouser DE, Chuang YM, Chang AL, Zeng LH, Chen SS, Lin RI, Wu CS, Wei KL, Ng EK, Yan PS, Cheng AS, Li C, and [Chan MW](#). Aberrant JAK/STAT signaling orchestrates global promoter methylation and promotes TGF-beta mediated EMT through epigenetic silencing of miR-193a in gastric cancer *in* Proceedings of American Association for Cancer Research. New Orleans, USA. 2016.
 11. Cheng FH, Aguda BD, Lin HY, Tsai JC, Kochanczyk M, Lin RI, Cheng GC, Chang CC, Lai HC, Nephew KP, Hwang TW, [Chan MW](#). Bistable switching of c-KIT by estrogen-mediated ceRNA and epigenetic silencing of miR-193a predicts survival in ovarian cancer *in* Proceedings of American Association for Cancer Research. New Orleans, USA. 2016.
 12. Lin HY, Hung SK, Lee MS, Chiou WY, Huang TT, Tseng CE, Shih LY, Lin RI, Lin JM, Lai YH, Chang CB, Hsu FC, Chen LC, Tsai SJ, Su YC, Li SC, Lai HC, Hsu WL, Liu DW, Tai CK, Shu-Fen Wu SF, [Chan MW](#). DNA methylome analysis identifies epigenetic silencing of FHIT as a determining factor for radiosensitivity in oral cancer and its implication in treatment and outcome prediction *in* Proceedings of American Association for Cancer Research. Philadelphia, USA. 2015.
 13. [Chan MW](#), Zeng LH, Chang LY, Dittner C, Chou JL, Huang YT, Cheng AS, Lin J, Yeh KT. Epigenetic silencing of a potential tumor suppressor NR4A3 by aberrant JAK/STAT signaling predicts prognosis in gastric cancer *in* Proceedings

of American Association for Cancer Research. San Diego, USA. 2014.

14. Lin JM, Shay J, Yan PS, Chou JL, Huang TH, Lai HC, [Chan MW](#). The role of EZH2 as an epigenetic switch of the TGF- β /SMAD4 targets in regulating EMT in ovarian cancer *in* Proceedings of American Association for Cancer Research. San Diego, USA. 2014.
15. Huang WY, Chen PC, Yeh CM, Cheng FH, Hsieh HY, Shen CH, Hsu CD, and [Chan MW](#). Epigenetic control of the tumor suppressive microRNA, miR-34a in bladder cancer *in* Proceedings of American Association for Cancer Research. San Diego, USA. 2014.
16. Cheng FH, Chen GC, Chou JL, Lin YW, Chen LY, Li C, Lai HC, [Chan MW](#). Hypermethylation of a TGF- β regulated micro-RNA, miR-193a, predicts prognosis in ovarian cancer *in* Proceedings of American Association for Cancer Research. San Diego, USA. 2014.
17. Yeh CM, Chen PC, Huang WY, Shen CH, Hsu CD, [Chan MW](#). Identification of a novel hypermethylated tumor suppressor gene in human bladder cancer *in* Proceedings of American Association for Cancer Research. San Diego, USA. 2014.
18. Zeng LH, Chang LY, Dittner C, Chou JL, Cheng AS, Lin J, Yeh KT and [Chan MW](#). Epigenetic silencing of NR4A3 and LOXL4 by aberrant JAK/STAT signaling predicts prognosis in gastric cancer *in* Cancer Genetics & Epigenetics. Lucca, Italy. 2013
19. Yeh CM, Chen PC, Chen YH, Hung LC, Wang YT, Tsai MH, Huang MM, Shen CH, Hsu CD, [Chan MW](#). Identification of a novel hypermethylated tumor suppressor gene in human bladder cancer and its implication in non-invasive cancer detection using voided urine *in* Proceedings of American Association for Cancer Research (103rd annual meeting). Washington, DC. 2013 (Abstract no:644).
20. Zeng LH, Chang LY, Dittner C, Chou JL, Cheng AS, Lin J, Yeh KT and [Chan MW](#). Epigenetic silencing of NR4A3 and LOXL4 by aberrant JAK/STAT signaling predicts prognosis in gastric cancer *in* Digestive Disease Week, San Diego, CA. 2012 (Abstract #1296929, oral presentation)

21. Chen LY, Huang RL, Chou HL, Chou JL, Deng WT, Yang HW, Lin RI, Li C, Lin HJ, Huang THM, Chiu CC, Lai HC, and [Chan MW](#). Disruption of TGF-beta signaling induces demethylation of E-cadherin promoter and reverses mesenchymal phenotype in ovarian cancer *in* Proceedings of American Association for Cancer Research (102nd annual meeting). Orlando, FL. 2011 51:3433.
22. Lin HJ, Peng ZG, Zhou WC, Scott JR, Chao JR, Teng KY, Shen RL, [Chan MW](#). Dichotomy effects of AKT signaling on breast epithelia by inhibiting epithelial-mesenchymal transition, motility and stem cell expansion but sustaining cell survival *in* Proceedings of American Association for Cancer Research (102nd annual meeting). Orlando, FL. 2011 51:1025.
23. Su PH, Lin YW, Liao YP, Wang YC, Lee HY, Wang HC, Chao, TK, Chen CK, [Chan MW](#), Chu TY, Yu MH, Lai HC. An epigenetic vicious cycle of DNMT, protein tyrosine phosphatase receptor type R and the MAPK pathway in cancer metastasis *in* Proceedings of American Association for Cancer Research (102nd annual meeting). Orlando, FL. 2011 51:105
24. Chou JL, Chen LY, SU HY, Lin SJ, Huang YW, Deatherage DE, Yan PS, Nephew KP, Lee CI, Huang THM, Lai HC, and [Chan MW](#). Hypomethylation of TGF-beta target gene, ABCA1 in ovarian cancer and cancer initiating cell and is associated with poor prognosis in cancer patients *in* Proceedings of American Association for Cancer Research (102nd annual meeting). Orlando, FL. 2011 51:83
25. Chou JL, Su HY, Chen LY, Liao YP, Hartman-Frey C, Lai YH, Yang HW, Deatherage DE, Kuo CT, Huang YW, Yan PS, Hsiao SH, Tai CK, Lin HJ, Davuluri DV, Chao TK, Nephew KP, Huang THM, Lai HC, and [Chan MW](#). Promoter hypermethylation of FBXO32, a novel TGF- β /SMAD4 target gene and tumor suppressor, is associated with poor prognosis *in* human ovarian cancer in Proceedings of American Association for Cancer Research (101st annual meeting). Washington, DC. 2010 50:3072
26. Chang AL, Dittner C, Chou JL, Cheng AS, Lin J, Yeh KT, and [Chan MW](#). Aberrant JAK/STAT signaling confers epigenetic silencing of STAT3 targets in gastric cancer integrated microarray and bioinformatic analysis *in* Proceedings of

American Association for Cancer Research (101st annual meeting). Washington, DC. 2010 50:1232

27. Tsai MH, Chen PC, Chen Y, Wang X, Huang W, Tung CL, Tong JHM, Hsu CD, Li C, Jou YC, To KF, Shen CH and [Chan MW](#). Distinct gene promoter hypermethylation profile in bladder cancer patients from different Chinese populations and its implication in cancer detection using voided urine samples *in* Proceedings of American Association for Cancer Research (101st annual meeting). Washington, DC. 2010 50:4705
28. Chou JL, Yang HW, Su HY, Chen YL, Huang YW, Deatherage DE, Yan PS, Hsiao SH, Leu YW, Nephew KP, Huang THM, Lai HC, and [Chan MW](#). Epigenetic dysregulation of TGF- β /SMAD4 targets contribute to CpG island methylator phenotype and predict survival in ovarian cancer *in* Proceedings of American Association for Cancer Research (100th annual meeting). Denver., USA. 2009 49: 1315. ([AACR Ito-En Inc., Scholar-in-Training Award](#))
29. Peng Z, Chao JR, Penton C, Yamashita SS, Liu S, [Chan MW](#), Jin VX, Huang TH, Wicha MS and Lin HJ. ALDH-positive population of basal subtype breast cancer cell lines harbors stem/progenitor properties with aberrant methylation at ADAM19 promoter *in* Proceedings of American Association for Cancer Research (100th annual meeting). Denver., USA. 2009 49: 3079.
30. Yang HW, Chou JL, Su HY, Chen LY, Huang YW, Deatherage D, Yan PS, Hsiao SH, Leu YW, Nephew KP, Huang THM, Lai HC, and [Chan MWY](#). Epigenetic dysregulation of TGF-beta/SMAD4 targets contribute to CpG island methylator phenotype and its role in cancer stem/progenitor cells in ovarian cancer *in* Proceedings of The 24th joint Annual Conference of Biomedical Science, Taipei (abstract number O45)
31. Chou JL, Yang HW, Qin H, Liyanarachchi S, Yan PS, Davuluri RV, Nephew KP, Lin HJ, Huang THM, and [Chan MWY](#). Aberrant TGF- β signaling pathway contributes to epigenetic silencing of SMAD4 targets in ovarian cancer cells *in* International Symposia on Stem Cells, Epigenetics and Development, Taipei, Taiwan. 2008 (abstract number PE-7)
32. Zhang S, [Chan MW](#), Balch C, Yan PS, Desai D, Montgomery JS, Huang THM, and Nephew KP. Identification and characterization of cancer stem-like cells

- from human ovarian carcinomas *in* Proceedings of American Association for Cancer Research (98th annual meeting). Los Angeles., USA. 2007 47: 239
33. Huang YW, Singer GA, [Chan MW](#), Yan PS, Nephew KP, Davuluri RV, Huang THM. Genome-wide analysis uncovers widespread alternative promoter usages in ovarian surface epithelial cells upon activation of TGF- β signaling *in* Proceedings of American Association for Cancer Research (98th annual meeting). Los Angeles., USA. 2007 47: 2442
 34. [Chan MW](#), Yan PS, Han J, Crijns AP, Cheng AS, Liu JC, Matei DE, Wang Z, Liyanarachchi S, Souriraj IJ, Sun H, Jansen RA, Potter D, Lin S, Van der Zee AGJ, Brown R, Davuluri RV, Nephew KP, Saltz JH and Huang TH. Dysregulation of TGF β /Smad4 signaling and contribution of a CpG island methylator phenotype in ovarian cancer *in* Proceedings of American Association for Cancer Research (97th annual meeting). Washington, D.C., USA. 2006. 46: 39 ([AACR-Aflac Inc., Scholar-in-Training Award](#))
 35. Cheng YY, Jin VX, [Chan MW](#), Leung WK, Sung JJY, Huang THM, and Chan FKL. Reactivation of tumor suppressor genes by demethylation in human gastric cancer *in* Proceedings of American Association for Cancer Research (97th annual meeting). Washington, D.C., USA. 2006. 46:13
 36. Cheng AS, Jin VX, Fan MY, Smith LT, Liyanarachchi S, Yan PS, Leu YW, [Chan MW](#), Plass C, Nephew KP, Davuluri R, and Huang TH. Combinatorial analysis of transcription factor partners reveals c-MYC as a positive regulator in estrogen receptor- α -mediated gene activation *in* Proceedings of American Association for Cancer Research (97th annual meeting). Washington, D.C., USA. 2006. 46:5612 ([AACR Scholar-in-Training Award](#))
 37. [Chan MWY](#), Cheng ASL, Chan KK, Chan VYW, To KF, Chan FKL, Sung JJY, and Leung WK. Targeted inhibition of COX-2 expression by RNA interference suppresses growth of human gastric cancer cells *in* Proceedings of American Association for Cancer Research (95th annual meeting). Orlando, USA. 2004. 45:3616.
 38. Leung WK, To KF, Chu ES, [Chan MW](#), Ng EK, Chan FK and Sung JJ. Prognostic significance of hypermethylated APC DNA in serum of patients with gastric adenocarcinoma *in* Proceedings of American Association for Cancer

Research (95th annual meeting). Orlando, USA. 2004. 45:909.

39. Chan VY, [Chan MW](#), To KF, and Chan FK. siRNA silencing of TFF3 modulated angiogenesis, invasion and proliferation properties of gastric cancer cell line MKN45 *in* Proceedings of American Association for Cancer Research (95th annual meeting). Orlando, USA. 2004. 45:1448.
40. Tong JH, Lo WK, Yim SF, Au FW, So CY, [Chan MW](#), Cheung TH, Yu MY and To KF. Quantitative RASSF1A promoter hypermethylation analysis in cervical scrapings from patients with cervical cancer and pre-cancerous lesion *in* Proceedings of American Association for Cancer Research (95th annual meeting). Orlando, USA. 2004. 45:2695.
41. Bai AH, [Chan MW](#), Yu J, Man EP, Sung JJ, and Leung WK. DNA methylation spread within HLTF CpG island in colorectal cancer *in* Proceedings of American Association for Cancer Research (95th annual meeting). Orlando, USA. 2004. 45:4176.
42. Bai AHC, Tong JHM, Man EPS, [Chan MWY](#), To KF, Sung JJY, and Leung WK. Methylation profiles of sporadic colorectal cancer and adenoma *in* Digestive Disease Week, Orlando, USA, 2003. Publishing no: S1648.
43. Chan VYW, To KF, [Chan MWY](#), Leung WK, Sung JJY, and Chan FKL. Effects of anti-sense TFF3 on growth and expression of *TIMP1* and *NF- κ B* in gastric cancer cell line *in* Digestive Disease Week, Orlando, USA, 2003. Publishing no: T961. [\(Poster of Distinction\)](#)
44. Cheung KW, Tong JHM, Au FW, [Chan MW](#), Yu MM, To KF. Promoter hypermethylation of *Adenomatous Polyposis Coli* gene in endometrial hyperplasia and carcinoma *in* Proceedings of American Association for Cancer Research (94th annual meeting). Washington, DC, USA. 2003. 44:1135.
45. Au FWL, Yu MMY, Tong JHM, [Chan MWY](#), Chan AWH, Lo KW, and To KF. Promoter hypermethylation of multiple genes in cervical cancer and its precursor lesions *in* Proceedings of American Association for Cancer Research (94th annual meeting). Washington, D.C. 2003. 44: 1123.
46. To KF, [Chan MWY](#), Leung WK, Yu J, Tong JHM, Lo KW, and Chan FKL. Re-

expression of SOCS-1 by demethylation suppress IL-6 mediated JAK/STAT pathway in AGS gastric cancer cell line *in* Proceedings of American Association for Cancer Research (94th annual meeting). Washington, D.C. 2003. 44: 2418.

47. [Chan MWY](#), Chan LW., Tang NLS., Hui ABY, Tong JHM., Chan AWH, Cheung HY, Wong WS, Chan PSF, Lai FMM., Lo KW, and To KF. Progressive increase in genetic and epigenetic changes in urinary bladder cancer *in* Proceedings of American Association for Cancer Research (94th annual meeting). Washington, D.C. 2003. 44: 2449.
48. To KF, [Chan MWY](#), Leung WK, Ng EKW, Yu J, and Chan FKL. Promoter hypermethylation associated with *SOCS-1* down regulation in gastric cancer *in* Digestive Disease Week, San Francisco, USA, 2002. Publishing no: s888.
49. Tong JHM, Yu MMY, Chan PKS, Lee TL, [Chan MWY](#), Lo KW, To KF. Hypermethylation of *RASSF1A* gene in cervical cancer and high grade cervical intraepithelial neoplasia *in* Proceedings of American Association for Cancer Research (93rd annual meeting). San Francisco, USA. 2002. 43:5529.
50. [Chan MWY](#), Chan LW, Tang NLS, Lo KW, Tong JHM, Cheung HY, Wong WS, Chan PSF, Lai FMM, and To KF. Frequent hypermethylation of promoter region of *RASSF1A* in tumor tissues and voided urine of urinary bladder cancer patients *in* Proceedings of American Association for Cancer Research (93rd annual meeting). San Francisco, USA. 2002.43:5600.
51. To KF, [Chan MWY](#), Chan KFL, Leung WK, Tong JHM, and Sung JJY. Suppression of tumorigenicity in gastric cancer cell line by anti-sense trefoil factor 3 *in* Proceedings of American Association for Cancer Research (93rd annual meeting). San Francisco, USA. 2002.43:432.
52. To KF, Lee TL, Leung WK, Ng EKW, Tong JHM, [Chan MWY](#), Sung JJY. Gene promoter hypermethylation in intestinal metaplasia of patients with and without gastric cancer. *in* Digestive Disease Week, Atlanta, USA, 2001. Publishing no: 871.
53. Leung WK, Yu J, Chan FKL, To KF, [Chan MWY](#), Ebert MPA, Ng EKW, Chung SSC, Malfertheiner P, and Sung JJY. Expression of trefoil peptide-1, -2, -3 in various stages of gastric carcinogenesis. *in* Digestive Disease Week, Atlanta,

USA, 2001. Publishing no: 853.

54. To KF, [Chan MWY](#), Leung WK, Yu J, Lee TL, Tong JHM, and Sung JJY. Alterations of Wnt receptor (FzE3) and secreted frizzled related protein (hsFRP) expression in gastric cancer. *in* Digestive Disease Week Atlanta, USA, 2001. Publishing no: 2523.
55. Tong JHM, To KF, Tsang RKY, Lo KW, Hui WY, [Chan MWY](#), Lee TL, Woo JKS, Huang DP, and Andrew VH. Quantitative Epstein-Barr virus (EBV) DNA analysis in nasopharyngeal brush samples: diagnostic value in nasopharyngeal carcinoma *in* Proceedings of American Association for Cancer Research (92nd annual meeting). New Orleans, USA. 2001. 42:752.
56. Lee TL, To KF, Ng KW, Lau YW, Tong JHM, Leung WK, [Chan WY](#), Tong HM, Leung WK, Chan KL, Lo KW, Chung SSC, Sung JJY. Aberrant hypermethylation of Death associated protein kinase (*DAP-kinase*) in gastric carcinoma and serum samples: its potential diagnostic and prognostic implication *in* Proceedings of American Association for Cancer Research (92nd annual meeting). New Orleans, USA. 2001. 42:705. ([AACR Ito-En Inc., Scholar-in-Training Award](#))
57. [Chan MWY](#), Chan LW, Tang NLS, Lee TL, Tong JHM, Lo KW, Cheung HY, Wong WC, Chan PSF, Lai FMM, and To KF. Hypermethylation of multiple genes in tumor tissues and voided urine in urinary bladder cancer patients *in* Proceedings of American Association for Cancer Research (92nd annual meeting). New Orleans, USA. 2001. 42:705. ([AACR Ito-En Inc., Scholar-in training award](#))
58. Wong WCW, Lee TL, Leung WK, Ng KW, [Chan MWY](#), Tong JHM, Lai FMM, and To KF. Inverse association between *p14ARF* hypermethylation and *p53* mutation in gastric cancer. *in* Proceedings of American Association for Cancer Research (92nd annual meeting). New Orleans, USA. 2001. 42:476
59. [Chan MWY](#), Chan LW, Tang NLS, Lee TL, Tong JHM, Lo KW, Cheung HY, Wong WS, Chan PSF, Lai FMM, and To KF. Detection of gene promoter methylation in voided urine of urinary bladder cancer patients *in* The 2nd International Symposium on Circulating Nucleic Acid in Plasma and Serum

(CNAPS-2). Hong Kong. China. 2001 abstract no:24

60. Tong JHM, Lau JYW, Lee TL, Ng EKW, [Chan MWY](#), Leung WK, Chan FKL, Sung JJY and Chung SCS. Role of β -catenin gene mutation in gastric carcinoma *in Digestive Disease Week*. San Diego, USA. 2000 Publishing no. 471.
61. Tong JHM, To KF, Tsoi WC, Lee TL, Ko CW, [Chan MWY](#), Huang DP. Prevalence of Epstein-Barr virus LMP-1 deletion variant in T/NK lymphoma in Hong Kong. *in Proceedings of American Association for Cancer Research (91st annual meeting)*. San Francisco, USA. 2000. 41:317.
62. Lee TL, To KF, Ng KW, Tong JHM, [Chan MWY](#), Leung WK, Lo KW, Sung JJY. Hypermethylation of E-cadherin CpG island in Human Gastric Carcinoma Tissue and Serum Samples *in Proceedings of American Association for Cancer Research (91st annual meeting)*. San Francisco, USA. 2000. 41:497
63. [Chan MWY](#), Lee TL, Tong JHM, Lo KW, Wong WS, Chan LW, Lai FMM, To KF. Hypermethylation of 5'CpG Islands of Death Associated Protein (DAP) Kinase in Urinary Bladder Cancer *in Proceedings of American Association for Cancer Research (91st annual meeting)*. San Francisco, USA. 2000. 41:496.
64. Tang NLS, Chan CK, To KF, [Chan MWY](#), Chan LW, Chan PSF, Lai FMM. Genetic epidemiology of prostate cancer in Chinese: study of vitamin D receptor gene *in Proceedings of the 32nd Asia Pacific Academic Consortium for Public Health: Public Health Education for the 21th Century*. Hong Kong. 2000. p. III.
65. [Chan MWY](#), Song EJ, Chiang CD, Cheng V. Characterization of a vincristine-resistant human lung cancer cell line *in Proceedings of The Fifteenth R.O.C. Symposium on Electron Microscope*. Taiwan, ROC. 1994. pp.25-26.

Ph.D. Dissertation

Allelotyping and promoter hypermethylation of urinary bladder cancer