

Name

- Wen-Lung Ma

Title

- Associate Professor

Contact

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**Resume**

- Degree:
 - 1997 B.S., Chinese Medical College, Taiwan. Field of study: Nursing
 - 1999 M.S., National Cheng Kung University. Field of study: Physiology
 - 2001 Lieutenant, Taiwan Army Medical School (ROTC) Field of study: Cutaneous surgical, Wound care
 - 2010 Ph.D., Taiwan University of Rochester, New York. Field of study: Pathology
- Experiences:
 - 2016- Associate Professor, Graduate Institution of Clinical Medical Science, China Medical University
 - 2010-2014 Assistant Researcher, Sex Hormone Research Center, China Medical University Hospital
 - 2011-2016 Assistant Professor, Graduate Institution of Clinical Medical Science, China Medical University
 - 2010 Postdoc fellow, Dept. Pathology, University of Rochester,
- Honors and awards:
 - 2007 Student travel award for “The Endocrine Society’s 89th Annual Meeting at Toronto”, 2007, June 2
 - 2010 Aflac Inc. Young Investigator Award, Travel grant for

Scientist-In-Training Award for participating American Association for Cancer Research (AACR) Annual meeting (101st AACR), Washington, D.C., USA

- 2010 Outstanding Scientific Article Award, Taiwan Liver Diseases Association
- 2012 Outstanding Research Faculty Award, China Medical University
- 2012 Poster Award, Liver Cancer Meeting, European Association for Cancer Research (EACR), Heidelberg, German
- 2013 2nd International Conference and Exhibition on Gene and Cell Therapy, Orlando, FL, USA. Invited Speaker: Title: Sex and MicroRNA in Cancer Stem/Progenitor Cells
- 2013 The 7th Guangdong and Hong Kong Conference on Liver Disease, Invited Speaker: Title: SEX OR NOT? THAT IS A QUESTION: Translating Androgen Receptor Basic Studies to The Management of Liver Cancer, Guangzhou First Municipal People's Hospital, Guangzhou Medical University, China
- 2013 Invited reviewers in the *International Journal of Cancer*
Invited reviewer in the *Stem Cell Translational Medicine* journal
- 2014 Invited managing editorial board in the journal *FRONTIERS IN BIOSCIENCE*
Invited Editorial Board Member in the *Journal of Gynecology and Obstetrics*
Invited Reviewer in journal *Cancer Letters*
Invited Reviewer in *Journal of Cellular and Molecular Medicine*
Invited Reviewer in *OncoTargets and Therapy* journal
Invited Reviewer in *Hepatobiliary & Pancreatic Diseases International* journal
Invited Reviewer in *Biomarkers in Cancer* journal
指導醫學系學生獲得財團法人臺灣醫學發展基金會論文獎競賽第三名
- 2015 Distinguished Young Scientist Award grant from Taiwan Ministry Of Sciences and Technology (MOST) for four year continue support. Grant title: Translational Liver Cancer Research: From Androgen Receptor Signal Basic Study to The Evaluation of Therapeutic Potentials
Reviewer in *PLOS One* journal : (2016) *PLOS ONE* 2015
Reviewer Thank You. PLoS ONE 11(2): e0150341.
Invited Reviewer in *Journal of Cellular and Molecular Medicine*
- 2016 Invited Reviewer in *International Journal of Cancer*
10th Global Annual Oncologist Meeting, Cologne, Germany, 7/13-15, 2016; Invited Speaker: Title: Cholesterol Import and Steroidogenesis are Biosignatures for Gastric Cancer Progression

- Membership
 - Member of Endocrine society, USA
 - Member of American Association of Cancer Research, USA_
 - Member of European Association of Cancer Research, Europe
 - Member of International Liver Cancer Association (ILCA)
 - Member of American Society of Cell Biology, USA

Fields of Specialty

- Endocrinology
- Cancer Biology
- Cell Biology
- Hepatology
- Steroid Biology
- Transgen animal
- Molecular Biology

Research

- Cell Anoikis/Circulating cancer cell
- Cancer metabolism
- Cancer stem cell biology
- Cancer immunology

Paper & Project

1. W-C Chang, B-H Cheng, L-J Ju, Y-C Hung, W-C Cheng, L-B Jeng, **W-L Ma***, **Web-Based Meta-Analysis Revealed Mitochondrial Acetyl-CoA Synthetase 3 and Lower Mevalonate Pathway Enzymes are Gastric Cancer Progression Biosignatures** (manuscript in preparation; * corresponding author))
2. W-C Chang, S-F Huang, Y-M Lee, H-C Lai, B-H Cheng, W-C Cheng, Y-P Ho, L-B Jeng, W-L Ma, **Cholesterol Import and Steroidogenesis are Biosignatures for Gastric Cancer Progression, Oncotarget**, (IF: 5.03; Cell Biology ;* corresponding author)
3. Y-C Chiang, R-Y Wang, C-L Huang, S-H Chen, W-J Ho, H-Y Lane, I-K Ho, H-T Yang, **W-L Ma***, Targeting Estrogen Signal for Morphine Addiction in Methadone Maintenance Treatment, **Journal of Cellular and Molecular**

- Medicine*, 2016 (IF:4.9; MEDICINE, RESEARCH & EXPERIMENTAL 24/123=19.5%;* corresponding author)
4. L Chen, B-Y Bao, W-C Chang, Jason Y-P Ho, B-H Cheng, C-L Wang, Q Tang, Y-C Hung, **W-L Ma***, Short Androgen Receptor Poly-Glutamine Promoted Endometrial Cancer is Associated with Benzo[a]pyrene-Mediated Aryl Hydrocarbon Receptor Activation, 2016 *Journal of Cellular and Molecular Medicine*, (IF:4.9; MEDICINE, RESEARCH & EXPERIMENTAL 24/123=19.5%;* corresponding author)
 5. H-C Lai, C-C Yeh, L-B Jeng, S-F Huang, P-Y Liao, F-J Lei, W-C Cheng, C-L Hsu, X Cai, C Chang, **W-L Ma***, Androgen Receptor Mitigates Postoperative Disease Progression of Hepatocellular Carcinoma by Suppressing CD90+ Populations and Cell Migration and by Promoting Anoikis in Circulating Tumor Cells, *Oncotarget*, 2016 Jun 20. doi: 10.18632/oncotarget.10186 (IF: 5.03; Cell Biology ;* corresponding author)
 6. L Shi, H Lin, G Li, R-A Jin, J Xu, Y Sun, **W-L Ma**, S Yeh, X Cai,* and C Chang, Targeting Androgen Receptor (AR)→IL12A Signal Enhances Efficacy of Sorafenib Plus NK Cells-Immunotherapy to Better Suppress HCC Progression, *Mol Cancer Ther.* 2016 Apr;15(4):731-42. doi: 10.1158/1535-7163.MCT-15-0706 (IF: 5.683; Oncology 23/202 = 11.4%)
 7. Y-M Lee, W-C Chang, **W-L Ma***, Hypothesis: Solid Tumors Behave As Metabolic Dictators, 2016 *Journal of Cellular and Molecular Medicine*, 2016, doi: 10.1111/jcmm.12794 (IF:4.014; MEDICINE, RESEARCH & EXPERIMENTAL 24/123=19.5%;* corresponding author)
 8. C-M Liu, K-L Chiu, T-S Chen, S-M Chang, S-Y Yang, L-H Chen, Y-L Ni, Y-P Sher, S-L Yu, and **W-L Ma***, Potential Therapeutic Benefit of Combining Gefitinib and Tamoxifen for Treating Advanced Lung Adenocarcinoma, *BioMed Research International*, 2015, Article ID 642041, <http://dx.doi.org/10.1155/2015/642041> (IF: 1.579; BIOTECHNOLOGY & APPLIED MICROBIOLOGY: 107/163=65.6%)
 9. C-L Hsu, J-S Liu, P-L Wu, H-H Guan, Y-L Chen, A-C Lin, H-J Ting, S-T Pang, S-D Yeh, **W-L Ma**, C-J Chen, W-G Wu, C Chang, Identification of a new androgen receptor (AR) co-regulator BUD31 and related peptides to suppress wild-type and mutated AR-mediated prostate cancer growth via peptide screening and X-ray structure analysis. *Molecular Oncology*, 2014

Dec;8(8):1575-87 DOI: 10.1016/j.molonc.2014.06.009 (IF:5.331; ONCOLOGY 28/211=13.3%)

10. **Ma WL***, Jeng LB, Lai HC, Liao PY, Cai XC, Chang C, Androgen receptor enhances cell adhesion and decreases cell migration *via* modulating β 1-integrin-AKT signaling in hepatocellular carcinoma cells, ***Cancer Letters***, 2014;351(1):64-71. doi: 10.1016/j.canlet. 2014.05.017 (IF: 5.621; **Oncology**: 24/211=11.4%)
11. Chung WM, Chang WC, Chen L, Lin TY, Chen LC, Hung YC, **Ma WL***, Ligand-independent Androgen Receptors Promote Ovarian Teratocarcinoma Cell Growth by Stimulating Self-Renewal of Cancer Stem/Progenitor Cells, ***Stem Cell Research***; 2014 Jul;13(1):24-35. doi: 10.1016/j.scr.2014.04.003. (IF=3.69; BIOTECHNOLOGY & APPLIED MICROBIOLOGY 31/163=19%)
12. Chang TY, Chuang WM, Li LY, Jeng LB, **Ma WL***, Durable Expression of In Vivo Gene Delivery in Normal and Tumor Livers by Minicircle DNA-Liposome Technology, ***Biomedical Research International***, 2014, dx.doi.org/10.1155/2014/156356 (IF: 1.579; BIOTECHNOLOGY & APPLIED MICROBIOLOGY: 107/163=65.6%)
13. Hung YC¹, Chang WC, Chen L, Chang YY, Wu LY, Chung WM, Lin TY, Chen LC, **Ma WL***, Non-genomic Estrogen/Estrogen Receptor α Promotes Malignant Immature Ovarian Teratoma in vitro, ***Journal of Cellular Physiology***, 229(6):752-61. doi: 10.1002/jcp.24495 (IF: 3.839; PHYSIOLOGY: 15/83=18.1%)
14. **Ma WL***, Lai HC, Yeh S, and Chang C, Androgen receptor roles in hepatocellular carcinoma, fatty liver, cirrhosis and hepatitis, ***Endocrine-Related Cancer***, 2014, 21(3):R165-82. doi: 10.1530/ERC-13-0283. (*corresponding author)(IF: 4.805; ENDOCRINOLOGY & METABOLISM 23/128=18%)
15. L Chen, W-C Chang, Y-C Hung Y-Y Chang, B-Y Bao, H-C Huang, W-M Chung, C-R Shyr, **W-L Ma***, Androgen receptor increases CD133 expression and progenitor-like population that associate with cisplatin-resistance in endometrial cancer cell line, ***Reproductive Sciences***, 2014, (21)3; p386 - 394. DOI: 10.1177/1933719113497281 (IF: 2.23; OBSTETRICS & GYNECOLOGY: 26/79=32.9%)
16. W-M Chung[†], W-C Chang[†], L Chen, Y-Y Chang, C-R Shyr, Y-C Hung* and **W-L Ma***, MicroRNA-21 promotes the ovarian teratocarcinoma PA1 cell line

by sustaining cancer stem/progenitor populations in vitro, *Stem Cell Research & Therapy* 2013, 4(4):88 doi:10.1186/scrt247 (IF: 3.368; MEDICINE, RESEARCH & EXPERIMENTAL: 36/123=29.27%)

17. C-K Huang, SO Lee, K-P Lai, **W-L Ma**, T-H Lin, M-Y Tsai, C-R Shyr, J Luo, and C Chang Targeting Androgen Receptor in Bone Marrow Mesenchymal Stem Cells Leads to Better Transplantation Therapy Efficacy in Liver Cirrhosis, *Hepatology* 2013, 57(4): 1550-63. (IF: 11.06; GASTROENTEROLOGY & HEPATOLOGY: 5/76=6.6%)
18. Hsieh TF, Chen CC, Chang CH, Yu AL, **Ma WL**, Shyr CR. The potential use of primary human upper urinary tract urothelial cell carcinoma (UUT-UCC) cultured cells for prognostic indicators and chemosensitivity test. *Exp Toxicol Pathol.* 2012, 12. pii: S0940-2993(12)00084-X.
19. Shyr CR, Chen CC, Hsieh TF, Chang CH, **Ma WL**, Yeh S, Messing E, Li TH, Li FY, Chang C, The expression and actions of androgen receptor in upper urinary tract urothelial carcinoma (UUTUC) tissues and the primary cultured cells, *Endocrine.* 2012, 43(1):191-9
20. **WL Ma***, LB Jeng, CC Yeh, C Chang* Androgen and Androgen Receptor Signals Jamming Monocyte/ Macrophage Functions in Premalignant Phase of Livers, *BioMedicine.* 2012, 2(4): 155-159 (* corresponding author) (non SCI)
21. **Ma WL***, Hsu CL, Yeh CC, Wu MH, Huang CK, Jeng LB, Hung YC, Lin TY, Yeh S, Chang C, Hepatic androgen receptor suppresses hepatocellular carcinoma metastasis through modulation of cell migration and anoikis, *Hepatology.* 2012 56(1): 176-85. (IF: 11.06; GASTROENTEROLOGY & HEPATOLOGY: 5/76=6.6%)
22. J-W Hsu, S Yasmin-Karim, MR. King, JC. Wojciechowski, D Mickelsen, ML. Blair, H-J Ting, **W-L Ma**, and Y-F Lee, Suppression of Prostate Cancer Cell Rolling and Adhesion to Endothelium by 1,25-DihydroxyvitaminD, *American Journal of Pathology.* 2011, 178(2):872-880
23. Wu MH, **Ma WL**, Hsu CL, Chen YL, Ou JH, Ryan CK, Hung YC, Yeh S, Chang C. Androgen receptor promotes hepatitis B virus-induced hepatocarcinogenesis through modulation of hepatitis B virus RNA transcription. *Science Translational Medicine.* 2010 May 19;2(32):32ra35. (IF: 15.843; MEDICINE, RESEARCH & EXPERIMENTAL: 2/123=1.63%)

24. Y Niu, T-M Chang, S Yeh, **W-L Ma**, Y Wang and C Chang, Differential androgen receptor signals in different cells explain why androgen-deprivation therapy of prostate cancer fails, ***Oncogene***, 2010 Jun 24;29(25):3593-604.
25. **W-L Ma***, C-L Hsu, M-H Wu, C-T Wu, C-C Wu, J-J Lai, Y-S Jou, C-W Chen, S Yeh, C Chang, Androgen receptor is a new potential therapeutic target for the treatment of hepatocellular carcinoma, ***Gastroenterology***. 2008 Sep;135(3):947-55, 955. (IF: 16.716; GASTROENTEROLOGY & HEPATOLOGY: 1/76=1.32%)
26. HY. Lin, IC. Yu, RS. Wang, YT Chen, NC Liu, S Altuwaijri, CL Hsu, **W-L Ma**, J Jokinen, J. D. Spark, S Yeh, C. Chang, Increased hepatic steatosis and insulin resistance in mice lacking hepatic androgen receptor. ***Hepatology***. 2008 Jun;47(6):1924-35.)
27. E. Kim*, **W-L Ma***(*co-first author*), D-L Lin, S Inui, Y-L Chen, C Chang, TR4 orphan nuclear receptor functions as an apoptosis modulator via regulation of Bcl-2 gene expression., ***Biochem Biophys Res Commun***. 2007 Sep 21;361(2):323-8. (IF: 2.297; BIOCHEMISTRY & MOLECULAR BIOLOGY: 180/290= 62.1%)
28. Y. Zheng, W-L Chen, **W-L Ma**, C Chang, J-H James Ou, Enhancement of gene transcription activity of androgen receptor by hepatitis B virus X protein, ***Virology***, 2007, Jul 5;363(2):454-61
29. Y-C Chuang, L-C Yang, P-H Chiang, H-Y Kang, **W-L Ma**, P-C Wu, F. DeMiguel, M. B. Chancellor, and N. Yoshimura, Gene gun particle encoding preproenkephalin cDNA produced analgesia against capsaicin-induced bladder pain in rats, ***Urology***, 2005, 65: 081-810.
30. H-Y Kang, KE Huang, S-J Chang, **W-L Ma**, C-S Lin, C Chang, Differential modulation of androgen receptor-mediated transactivation by Smad3 and tumor suppressor Smad4., ***J. Biol. Chem.***, 2002, 277(46):43749-56.

Patent

1. PHARMACEUTICAL COMBINATION FOR TREATING WITHDRAWAL SYNDROMES AND USE THEREOF (Taiwan and USA PCT; filed)
2. AROMATASE IRREVERSIBLE STEROIDAL INHIBITORS FOR THE TREATMENT OF GASTRIC CANCER AND THEREOF (USA PCT patent; filed)

3. CANCER THERAPY AGENT USING LONG-CHAIN FATTY ACID AS DRUG MODIFIER AND USE THEREOF (USA PCT patent; filed)

Research Support

Ongoing Research Support

MOST (104-2628-B-039 -001 -MY4) WL Ma (PI) 08/01/2015-07/31/2019
Translational Liver Cancer Research: From Androgen Receptor Signal Basic Study to The Evaluation of Therapeutic Potentials. Role: PI *Distinguished Young Scientist Grant Award

NHRI NHRI-EX102-10214BC WL Ma (PI) 01/01/2012-12/31/2016
Study of Hepatic Androgen Receptor Roles in Hepatocellular Carcinoma Progression. Role: PI

Completed Research Support

NSC 100-2314-B-039 -001 -MY2 WL Ma (PI) 01/01/2011-07/31/2012
Androgen Receptor roles in circulating cancer cells and relationship to hepatoma metastasis. Role: PI

MOST 103-2321-B-039-004-MY-2 WL Ma (PI) 08/01/2014-07/31/2016
Translational animal model approach toward opioid addiction: Preclinical trial of targeting estrogen signals in the methadone maintenance treatment. Role: PI

NSC 101-2314-B-039 -027-MY3 WL Ma (PI) 08/01/2012-07/31/2015
The Study of Androgen Receptor in Circulating Cancer Cells in Cancer Recurrence/Metastasis—Hepatocellular carcinoma. Role: PI