

name

# WEI-HUNG WENG

address  
26 Dalrymple St., Jamaica Plain,  
Boston, MA, USA 02130

tel +1 857 272 4721  
mail ckbjimmy@gmail.com  
skype ckbjimmy  
linkedin Wei-Hung Jimmy Weng

sex Male  
birth date Jan 26, 1985  
birth place Taipei City  
citizenship Taiwan

language English (fluent, IELTS 8.0)  
Mandarin Chinese (native)  
Taiwanese (native)  
Japanese (basic)

- Clinical decision making, and data-driven medicine
- Biomedical informatics innovation and startup

Master of Medical Science in Biomedical Informatics  
Harvard Medical School, Harvard University. Boston, MA, U.S.A.

Doctor of Medicine (M.D.) (Overall GPA: 3.99/4.0, Rank: 5/106)  
School of Medicine, Chang Gung University (CGU), Taoyuan, Taiwan

Exchange Student (Otolaryngology-Head and Neck Surgery, Massachusetts Eye and Ear Infirmary)  
Harvard Medical School. Boston, MA, U.S.A.

## Clinical

Resident Physician

Department of Pathology and General Medicine, Chang Gung Memorial Hospital (CGMH), Linkou, Taiwan

Visiting Student

Department of Pathology, University of Tokyo Hospital, Tokyo, Japan

Resident Physician (Medical volunteer of Taiwan Medical Mission in Swaziland)  
Mbanane Government Hospital, Mbabane, Hhohho, Swaziland

Medical Officer of Health, Secondary Lieutenant  
Republic of China Army, Chungli, Taiwan

Rotating Internship

CGMH, Linkou, Chiayi, Kaohsiung, Taiwan

In 7/2011, I studied for Taiwan medical licensing examination board examination  
From 5/2015 – 8/2015, I prepared for prerequisites of future study in biomedical informatics training program, participated in several workshops and hackathons, and traveled around the world

## Research

Research Fellow, The Laboratory of Computer Science (LCS), Massachusetts General Hospital (MGH)

Advisor: Dr. Henry Chueh. [Director of LCS in MGH]

- Collecting knowledge of curbside consultation for improvement of clinical decision making by using natural language processing and machine learning algorithms

Research Associate, Ultrafast Optics and Biomedical Imaging Lab., Molecular Imaging Center (MIC) in National Taiwan University (NTU)

Advisor: Prof. Chi-Kuang Sun. [Director of Center. SPIE, IEEE, OSA Fellow]

- Medical imaging and clinical data analysis

- Commercialization and startup planning of virtual biopsy microscopy

Undergrad. Research Assistant, Kidney Research Center, Linkou CGMH

Advisor: Prof. Ya-Chung Tian. [Director of KRC, Linkou CGMH]

- Cytokines effects on polyomavirus BK infection

- Presentation, manuscript writing, and molecular cell biology techniques training

Undergrad. Research Assistant, Hematology Research Lab, Linkou CGMH

Advisor: Prof. Lee-Yung Shih. [Director of Cancer Molecular Diagnostics Lab, Linkou CGMH]

- Clinical data analysis of concomitance of essential thrombocythemia and chronic myeloid leukemia

Undergrad. Research Assistant, Department of Psychology, Linkou CGMH

Advisor: Prof. Chin-Yen Chen.

- Clinical data analysis of relationship between Stanford Sleepiness Scale and Heart Rate Variability in Medical Students

Summer Research Assistant, Cancer Immunology and Gene Therapy lab, Department of Pathology, Johns Hopkins Medical Institute (JHMI)

Advisor: Prof. Tzzy-Choou Wu.

- Journal article writing and literature reviews, and molecular cell biology techniques training

## Education and Background

## Professional Experience

# Curriculum Vitæ

Oct 1, 2015

name

# WEI-HUNG WENG

address  
26 Dalrymple St., Jamaica Plain,  
Boston, MA, USA 02130

tel +1 857 272 4721  
mail ckbjimmy@gmail.com  
skype ckbjimmy  
linkedin Wei-Hung Jimmy Weng

sex Male  
birth date Jan 26, 1985  
birth place Taipei City  
citizenship Taiwan

language English (fluent, IELTS 8.0)  
Mandarin Chinese (native)  
Taiwanese (native)  
Japanese (basic)

- Scholarship of Harvard Clubs of the Republic of China 2015
  - First Prize Award. HIT Biomedical Innovation Hackathon. Taiwan. 2015
  - OSCE Award. Taiwan Association of Medical Education. Taiwan 2011
  - 2nd Prize. Medical Record Writing Competition. CGMH. Kaohsiung, Taiwan 2011
  - Great Honor. Taiwan Medical Development Awards for Outstanding Writings. Taiwan 2010
  - Research Funding. Medical Foundation in Memory of Dr. Deh-Ling Cheng. Taiwan
  - Presidential Award 5 times (2007 2nd semester, 2006 1st semester, 2006 2nd semester, 2006 1st semester, 2005 2nd semester). School of Medicine, CGU. Taoyuan, Taiwan (for top 5% students) 2009
- 2005 - 2007

## Skills and Abilities

**Medicine** Board Certificate of Medical Doctor (Taiwan), Certificate of Advanced Cardiovascular Life Support, Certificate of Clinical Trial  
[Experience] 3 years in clinical medicine in medical center, clinics, army and rural area, nearly 1 year in pathology

**Programming** [Languages] R, Python, SQL, C [Tools] Matlab, ImageJ/Fiji

**Informatics** [Related course] Data science, Machine learning, Natural language processing, Data mining, Bioinformatics, Medical database, Linear algebra, Probability and statistics  
[Experience] iOS App 'LabBuddy' (Chinese), Prediction of pathological diagnosis by using SVM

## Publications

1. Lin, Y.-H., Chen, C.-Y., Lin, S.-H., Liu, C.-H., **Weng, W.-H.**, Kuo, T. B. J., & Yang, C. C. H. (2013). Gender differences in cardiac autonomic modulation during medical internship. *Psychophysiology*, 50(6), 521–527. doi:10.1111/psyp.12038
2. **Weng, W.-H.**, & Shih, L.-Y. (2011). Occurrence of BCR-ABL1-Positive Chronic Myeloid Leukemia following Essential Thrombocythemia. *Acta Haematologica*, 126(4), 220–223. doi:10.1159/000330524
3. Hung, C.-F., Monie A., **Weng, W.-H.**, Wu, T.-C. (2010). DNA vaccines for cervical cancer. *Am J Transl Res*, 2(1), 75-87.

## Conference Papers

1. **Weng, W.-H.**, Tsai, M.-R., Liao, Y.-H., Sun, C.-K. (2015, February). Differentiating pigmented skin tumors by the tumor-associated melanocytes based on in vivo third harmonic generation microscopy. Oral session presented at SPIE Photonics West 2015, San Francisco, CA.
2. **Weng, W.-H.**, Tsai, M.-R., Liao, Y.-H., Sun, C.-K. (2014, November). Identifying melanocyte in pigmented skin lesions based on in vivo third harmonic generation microscopy. Poster session presented at Biomedical Molecular Imaging 2014. Taipei, Taiwan.
3. **Weng, W.-H.**, Liu, W.-M., Tsai, M.-R., Liao, Y.-H., Sun, C.-K. (2014, November). In vivo quantification of melanin mass density in human by using third harmonic generation microscopy. Poster session presented at Biomedical Molecular Imaging 2014. Taipei, Taiwan.
4. **Weng, W.-H.**, Tian, Y.-C. (2010, August). Interleukin-1 beta Inhibits BK virus gene expression and replication in human renal proximal tubular epithelial cells. Oral session presented at Taiwan Medical Development Awards for Outstanding Writings. Taipei, Taiwan.
5. **Weng, W.-H.**, Tian, Y.-C. (2009, September). IL-1 has suppressive effect on BKV replication. Oral session presented at Summer Student Study for Infectious Disease. Kaohsiung, Taiwan.
6. Chou, Y.-H., Hung, S.-Y., Lee, G.-G., **Weng, W.-H.**, Liao, Y.-H., Sun, C.-K., Shih, H.-T. (2015 July). Nuclei location enhancement based on improved efficient ellipse hough transform for third harmonic generation microscopy imaging. Oral session at IEEE ChinaSIP 2015, Chendu, China.
7. Liao, Y.-H., **Weng, W.-H.**, Sun, C.-K. (2015, June). Characterization of dendritic cells in pigmented skin tumors by harmonic generation microscopy. Oral session at 23rd World Congress of Dermatology, Vancouver, Canada.
8. Lee, G.-G., Cai, C.-S., Liao, Y.-H., **Weng, W.-H.**, Sun, C.-K., Tsai, M.-R., Hung, S.-Y., Huang, C.-H., Shih, H.-T., Yu, Z.-H. (2015, May). Quantitative Gabor feature analysis of collagen fibers in harmonically generated microscopy (HGM) imaging. Poster session at OMICS International Global Summit and Expo on Multimedia and Applications ETMN Pre-conference Workshop 2015, Kaohsiung, Taiwan.
9. Lee, S.-Y., **Weng, W.-H.**, Sun, C.-K. (2015, February). Super resolution brain imaging by using a two-photon fluorescence microscopy with harmonic modulation. Poster session presented at SPIE Photonics West 2015, San Francisco, CA.

## References

- Prof. Chi-Kuang Sun (mentor at NTU), [sun@ntu.edu.tw](mailto:sun@ntu.edu.tw)
- Prof. Gwo-Giun Chris Lee (research collaborator at NCKU), [gwooglee@gmail.com](mailto:gwooglee@gmail.com)
- Dr. Yi-Hua Liao (research collaborator at NTU Hospital), [yihualiao@ntu.edu.tw](mailto:yihualiao@ntu.edu.tw)
- Dr. George Gau (startup collaborator), [gautech@yahoo.com](mailto:gautech@yahoo.com)
- Prof. Lee-Yung Shih (mentor and advisor at CGU), [sly7012@cgmh.org.tw](mailto:sly7012@cgmh.org.tw)
- Dr. Ya-Chung Tian (advisor at CGU), [dryctian@adm.cgmh.org.tw](mailto:dryctian@adm.cgmh.org.tw)
- Prof. Min-Chi Chen (mentor at CGU), [mcc@mail.cgu.edu.tw](mailto:mcc@mail.cgu.edu.tw)
- Prof. Tzyy-Chou Wu (mentor at JHMI), [wutc@jhmi.edu](mailto:wutc@jhmi.edu)

# Curriculum Vitæ

Oct 1, 2015