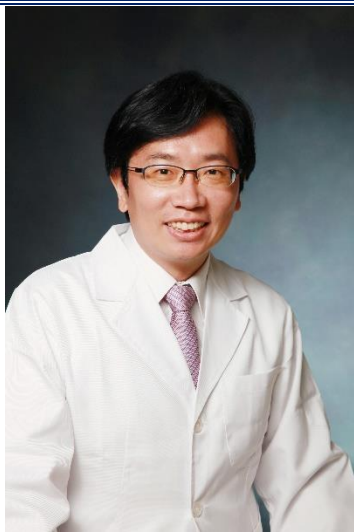


## Guang-Huar Young



E-mail : [youngguanghuar@gmail.com](mailto:youngguanghuar@gmail.com);

r6623612@ms24.hinet.net

Office Tel :

Education : Ph. D. Institute of Microbiology and Biochemistry, Biochemistry Division, National Taiwan University, Taipei, Taiwan.

Specialty : Biochemistry, Nephrology

Lab Web :

### Research Direction

Since Taiwan entered into high-aged society, the public health expenditure on renal disease is remaining obstinately high. The issue for prevention of renal disease becomes one of top public health challenges in our society.

The nephron composed a renal corpuscle and a renal tubule, as the functional unit of the kidney, in charge of metabolites re-absorption and urine production. In adults, the nephron exhibits a limited capacity for regeneration and differentiation, thereby the glomerular filtration rate in elderly is decline year by year. Furthermore, a growing literature provides evidence that kidney suffering injury accelerates the progression of chronic and irreversible kidney disease.

To contribute the good health and wellbeing for lives, our lab is dedicated to the study of translational medicine in kidney injury and develop the methods for early prediction and drug therapy, from the bench to the bedside.

Currently, the topics of our studies as follows:

1. Developing the methods of early prediction and drug treatment after kidney injury.
2. Slowing the progression of diabetic kidney disease by modulating purine salvage pathway.

### Publications

1. Jui-Yung Yang, Cha-Chun Chen, Shun-Cheng Chang, Jiun-Ting Yeh, Hui-Fu Huang, Hwang-Chi Lin, Shang-Hsi Lin, Yu-Hsien Lin, Lin-Gwei Wei, Tom J Liu, Shih-Yuan Hung, Hui-Mei Yang, Hui-Hsiu Chang, Chih-Hsin Wang, Yuan-Sheng Tzeng, Chieh-Huei Huang, Chang-Yi Chou, Ying-Sheng Lin, Shih-Yi Yang, Han-Min Chen, Jiun-Tsai Lin, Yi-Fang Cheng, **Guang-Huar Young**, Chun-Fang Huang, Ya-Chun Kuo, Niann-Tzyy Dai. *EClinicalMedicine*. 2022 Jul 10;51:101497. ENERGI-F703 gel, as a new topical treatment for diabetic foot and leg ulcers: A multicenter, randomized, double-blind, phase II trial. (IF=17.033, R/C=13/329, Medicine, General Internal)
2. **Guang-Huar Young**, Jiun-Tsai Lin, Yi-Fang Cheng, Chia-Fang Ho, Qian-Yu Kuok, Ru-Chun Hsu, Wan-Rou Liao, Chin-Chen Chen, and Han-Min Chen. *FASEB J*. 2021 Mar; 35(3): e21296. Modulation of adenine phosphoribosyltransferase-mediated salvage pathway to accelerate diabetic wound healing. (IF=5.834, R/C=20/113, BIOLOGY)
3. Huang-Ming Chang, Kang-Yung Peng, Chieh-Kai Chan, Chiao-Yin Sun, Ying-Ying Chen, Han-Mei Chang, Chun-Lin Huang, Pei-Chun Liu, Peng-Ying Chen, Kuo-Chuan Wang, Wei-Jie Wang, Chen-Chi Wu, Yu-Feng Lin, Tai-Shuan Lai, Tao-Min Huang, **Guang-Huar Young**, Shuei-Liong Lin, Marlies Ostermann, Tzong-Shinn Chu, Jeff S Chueh, Vin-Cent Wu. *Cell Death & Disease*. 2021 Apr 17;12(5):409. FGF23 ameliorates ischemia-reperfusion induced acute kidney injury via modulation of endothelial progenitor cells: targeting SDF-1/CXCR4 signaling. (IF=9.685, R/C=45/204, CELL BIOLOGY)
4. **Guang-Huar Young**, Sung-Chun Tang, Vin-Cent Wu, Kuo-Chuan Wang, Jing-Yi Nong, Po-Yuan Huang, Chaur-Jong Hu, Hung-Yi Chiou, Jiann-Shing Jeng, Chung Y Hsu. The functional role of hemojuvelin in acute ischemic stroke. *J Cereb Blood Flow Metab*. 2020 Jun; 40(6):1316-1327. (IF=6.960, R/C=22/180, Endocrinology & Metabolism)
5. Tzong-Ta Wu, Chin-Chen Chen, Jiun-Tsai Lin, **Guang-Huar Young**, Hsin-Chieh Wang, Han-Min Chen. The anti-inflammatory function of adenine occurs through AMPK activation and its downstream transcriptional regulation in THP-1 cells. *Biosci Biotechnol Biochem*. 2019 Dec; 83(12):2220-2229. (IF=2.337, R/C=248/322, Biochemistry & Molecular Biology)
6. Wen-Ching Shen, Chan-Jung Liang, Tao-Ming Huang, Chen-Wei Liu, Shu-Huei Wang, **Guang-Huar Young**, Jaw-Shiun Tsai, Ying-Chin Tseng, Yu-Sen Peng, Vin-Cent Wu, Yuh-Lien Chen. *Archives of Toxicology*. 2016 (90) 2779–2792. Indoxyl

sulfate enhances IL-1 $\beta$ -induced E-selectin expression in endothelial cells in acute kidney injury by the ROS/MAPKs/NF $\kappa$ B/AP-1 pathway. (IF=6.168, R/C=9/100, TOXICOLOGY)

7. **Guang-Huar Young**, Jiun-Tsai Lin, Yi-Fang Cheng, Chun-Fang Huang, Cheng-Yu Chao, Jing-Yi Nong, Po-Ku Chen and Han-Min Chen: *Journal of Proteomics* 2015 Apr 29;120:204-14. Identification of Adenine modulating AMPK activation in NIH/3T3 cells by Proteomic Approach. (IF=3.855, R/C=19/84, BIOCHEMICAL RESEARCH METHODS)
8. Yi-Fang Cheng\*, **Guang-Huar Young**\*, Jiun-Tsai Lin, Hyun-Hwa Jang, Chin-Chen Chen, Jing-Yi Nong, Po-Ku Chen, Cheng-Yi Kuo, Shao-Hsuan Kao, Yao-Jen Liang, Han-Min Chen. *PLoS One*. 2015 Nov 6;10(11):e0142283. Activation of AMP-activated protein kinase by adenine alleviates TNF-alpha-induced inflammation in human umbilical vein endothelial cells. (IF=3.752, R/C=28/135, MULTIDISCIPLINARY SCIENCES, \*Equal First Author)
9. Yi-Fang Cheng, **Guang-Huar Young**, Tsu-Man Chiu, Jiun-Tsai Lin, Pei-Ru Huang, Cheng-Yi Kuo, Yao-Jen Liang, Po-Ku Chen, Sung-Fang Chen, Ching-Yi Cheng, Han-Min Chen. *Experimental Dermatology*. 2016 Feb; 25(2):162-4. doi: 10.1111/exd.12881. Adenine supplement delays senescence in cultured human follicle dermal papilla cells. (IF=4.511, R/C=10/93, Dermatology)
10. **Guang-Huar Young**, Tao-Min Huang, Che-Hsiung Wu, Chun-Fu Lai, Chun-Cheng Hou, Kang-Yung Peng, Chan-Jung Liang, Shuei-Liong Lin, Shih-Chung Chang, Pi-Ru Tsai, Kwan-Dun Wu, Vin-Cent Wu\*, Wen-Je Ko\*, the NSARF group. *Antioxidants & Redox Signaling*. 2014 Mar 10;20 (8):1181-94. Hemojuvelin modulates iron stress during acute kidney injury: improved by furin inhibitor. (IF=7.468, R/C=48/322, BIOCHEMISTRY & MOLECULAR BIOLOGY).
11. Chiao-Yin Sun, **Guang-Huar Young**, Yu-Ting Hsieh, Yau-Hung Chen, Mai-Szu Wu, Jia-Hung Lee, Chin-Chan Lee. *Journal of the American Society of Nephrology*. 2015 Feb;26(2):281-90. Protein-bound uremic toxins induce tissue remodeling by targeting epidermal growth factor receptor. (IF=14.975, R/C=4/122, UROLOGY & NEPHROLOGY)
12. Chun-Fu Lai, Shuei-Liong Lin, Wen-Chih Chiang, Yung-Ming Chen, Vin-Cent Wu, **Guang-Huar Young**, Wen-Je Ko, Min-Liang Kuo, Tun-Jun Tsai, and Kwan-Dun Wu. *The American Journal of Physiology-Renal Physiology*. 2014 Jun 11. pii: ajprenal.00670.2013. Blockade of cysteine-rich protein 61 attenuates renal inflammation and fibrosis after ischemic kidney injury. (IF=4.097, R/C=25/122,

UROLOGY & NEPHROLOGY)

13. Chan-Jung Liang, Wen-Ching Shen, Fu-Bing Chang, Vin-Cent Wu, Shu-Huei Wang, **Guang-Huar Young**, Jaw-Shiun Tsai, Ying-Chin Tseng, Yu-Sen Peng, Yuh-Lien Chen. *Cell Transplantation*. 2015;24(7):1363-77. Endothelial progenitor cells derived from Wharton's jelly of human umbilical cord attenuate ischemic acute kidney injury by increasing vascularization and decreasing apoptosis, inflammation, and fibrosis. (IF=4.139, R/C=63/195, Medicine, Research & Experiment)
14. Vin-Cent Wu, Cho-Kai Wu, Yi-Cheng Chang, **Guang-Huar Young**, Shann-Ching Chen, Wei-Shiung Yang, Chien-Yuan Chen, Wei-Jie Wang, Chien-Yu Lin, Yen-Hung Lin, Shuei-Liong Lin, Shih-Chieh Chueh, Kwan-Dun Wu, TAIPEI study group. *Journal of Hypertension* 2013 July 31(7):1396-1405. Association of the variations in the HSD3[beta] gene with primary aldosteronism. (IF=4.776, R/C=17/91, PERIPHERAL VASCULAR DISEASE)
15. Vin-Cent Wu\*, **Guang-Huar Young\***, Po-Hsun Huang, Shyh-Chyi Lo, Kuo-Chuan Wang, Chiao-Yin Sun, Chan-Jung Liang, Tao-Ming Huang, Jou-Han Chen, Fan-Chi Chang, Yuh-Lien Chen, Yih-Shing Kuo, Jin-Bor Chen, Jaw-Wen Chen, Yung-Ming Chen, Wen-Jo Ko, Kwan-Dun Wu. *Angiogenesis*, 2013 Jul;16(3):609-24. In acute kidney injury, indoxyl sulfate impairs human endothelial progenitor cells: modulation by statin. (IF=10.658, R/C=5/91, PERIPHERAL VASCULAR DISEASE, \*Equal First Author)
16. Wen-Ching Shen, Chan-Jung Liang, Vin-Cent Wu, Shu-Huei Wang, **Guang-Huar Young**, I-Rue Lai, Chung-Liang Chien, Seu-Mei Wang, Kwan-Dun Wu, and Yuh-Lien Chen. *Stem Cells and Development*. 2013 May 1;22(9):1408-18. Endothelial progenitor cells derived from Wharton's jelly of the umbilical cord reduces ischemia-induced hind limb injury in diabetic mice by inducing HIF-1 $\alpha$ /IL-8 expression. (IF=4.390, R/C=24/94, Hematology)
17. Chih-Chung Shiao, Wen-Je Ko, Vin-Cent Wu, Tao-Min Huang, Chun-Fu Lai, Yu-Feng Lin, Chia-Ter Chao, Tzong-Shinn Chu, Hung-Bin Tsai, Pei-Chen Wu, **Guang-Huar Young**, Tze-Wah Kao, Jenq-Wen Huang, Yung-Ming Chen, Shuei-Liong Lin, Ming-Shou Wu, Pi-Ru Tsai, Kwan-Dun Wu, Ming-Jiuh Wang. *PLoS One* 2012, Aug 7(8):e42952. U-Curve Association between Timing of Renal Replacement Therapy Initiation and In-Hospital Mortality in Postoperative Acute Kidney Injury. (IF=3.752, R/C=28/135, MULTIDISCIPLINARY SCIENCES)
18. **Guang-Huar Young** and Vin-Cent Wu (2012, Apr). *Kidney International* 2012

Apr;81(7):611-2. KLOTTHO methylation is linked to uremic toxins and chronic kidney disease. (IF=18.998, R/C=3/122, UROLOGY & NEPHROLOGY)

19. Yi-Chen Lin, Han-Min Chen, I-Min Chou, An-Na Chen, Chia-Pei Chen, **Guang-Huar Young**, Chi-Tsai Lin, Chiung-Hsiang Cheng, Shih-Chung Chang, Rong-Huay Juang (2012, Apr). *PLoS One* 2012, 7:e35336. Plastidial Starch Phosphorylase in Sweet Potato Roots Is Proteolytically Modified by Protein-Protein Interaction with the 20S Proteasome. (IF=3.752, R/C=28/135, MULTIDISCIPLINARY SCIENCES)
20. Vin-Cent Wu, Chun-Fu Lai, Chih-Chung Shiao, Yu-Feng Lin, Pei-Chen Wu, Chia-Ter Chao, Fu-Chang Hu, Tao-Min Huang, Yu-Chang Yeh, I-Jung Tsai, Tze-Wah Kao, Yin-Yi Han, Wen-Chung Wu, Chun-Cheng Hou, **Guang-Huar Young**, Wen-Je Ko, Tun-Jun Tsai, Kwan-Dun Wu. *PLoS One* 2012 Mar 7:e30836. Effect of Diuretic Use on 30-Day Postdialysis Mortality in Critically Ill Patients Receiving Acute Dialysis. (IF=3.752, R/C=28/135, MULTIDISCIPLINARY SCIENCES)
21. Vin-Cent Wu, Tao-Min Huang, Pei-Chen Wu, Wei-Jie Wang, Chia-Ter Chao, Shao-Yu Yang, Chih-Chung Shiao, Fu-Chang Hu, Chun-Fu Lai, Yu-Feng Lin, Yin-Yi Han, Yih-Shang Chen, Ron-Bin Hsu, **Guang-Huar Young**, Shoei-Shen Wang, Pi-Ru Tsai, Yung-Ming Chen, Ting-Ting Chao, Wen-Je Ko, Kwan-Dun Wu, the NSARF Group. *PLoS One* 2012 Jan 7:e27687. Preoperative Proteinuria Is Associated with Long-Term Progression to Chronic Dialysis and Mortality after Coronary Artery Bypass Grafting Surgery. (IF=3.752, R/C=28/135, MULTIDISCIPLINARY SCIENCES)
22. Vin-Cent Wu, Tao-Min Huang, Chun-Fu Lai, Chih-Chung Shiao, Yu-Feng Lin, Tzong-Shinn Chu, Pei-Chen Wu, Chia-Ter Chao, Jann-Yuan Wang, Tze-Wah Kao, **Guang-Huar Young**, Pi-Ru Tsai, Hung-Bin Tsai, Chieh-Li Wang, Ming-Shou Wu, Wen-Chih Chiang, I-Jung Tsai, Fu-Chang Hu, Shuei-Liong Lin, Yung-Ming Chen, Tun-Jun Tsai, Wen-Je Ko and Kwan-Dun Wu, on behalf of the NSARF Group *Kidney International* 2011 Aug 7:e27687. Acute-on-chronic kidney injury at hospital discharge is associated with long-term dialysis and mortality. (IF=18.998, R/C=3/122, UROLOGY & NEPHROLOGY)
23. Yu-Hsiang Chou, Tao-Min Huang, Vin-Cent Wu, Cheng-Yi Wang, Chih-Chung Shiao, Chun-Fu Lai, Hung-Bin Tsai, Chia-Ter Chao, **Guang-Huar Young**, Wei-Jei Wang, Tze-Wah Kao, Shuei-Liong Lin, Yin-Yi Han, Anne Chou, Tzu-Hsin Lin, Ya-Wen Yang, Yung-Ming Chen, Pi-Ru Tsai, Yu-Feng Lin, Jenq-Wen Huang, Wen-Chih Chiang, Nai-Kuan Chou, Wen-Je Ko, Kwan-Dun Wu, Tun-Jun Tsai<sup>1</sup> and the NSARF Study Group. *Critical Care* 2011 Jun 15: R134. Impact of timing of renal replacement therapy initiation on outcome of septic acute kidney injury.

(IF=19.334, R/C=5/49, CRITICAL CARE MEDICINE)

24. Tao-Min Huang\*, Vin-Cent Wu\*, **Guang-Huar Young**, Yu-Feng Lin, Chih-Chung Shiao, Pei-Chen Wu, Wen-Yi Li, Hsi-Yu Yu, Fu-Chang Hu, Jou-Wei Lin, Yih-Sharng Chen, Yen-Hung Lin, Shoei-Shen Wang, Ron-Bin Hsu, Fan-Chi Chang, Nai-Kuan Chou, Tzong-Shinn Chu, Yu-Chang Yeh, Pi-Ru Tsai, Jenq-Wen Huang, Shuei-Liong Lin, Yung-Ming Chen, Wen-Je Ko and Kwan-Dun Wu. *Journal of the American Society of Nephrology* 2010 Nov 22(1):156-63. Preoperative Proteinuria Predicts Adverse Renal Outcomes after Coronary Artery Bypass Grafting. (IF=18.998, R/C=4/122, UROLOGY & NEPHROLOGY)

25. Chih-Chung Shiao, Vin-Cent Wu, Wen-Yi Li, Yu-Feng Lin, Fu-Chang Hu, **Guang-Huar Young**. Chin-Chi Kuo, Tze-Wah Kao, Down-Ming Huang, Yung-Ming Chen, Pi-Ru Tsai, Shuei-Liong Lin, Nai-Kuan Chou, Tzu-Hsin Lin, Yu-Chang Yeh, Chih-Hsien Wang, Anne Chou, Wen-Je Ko, Kwan-Dun Wu. *Critical Care* 2009 Oct 13(5): R171. Late initiation of renal replacement therapy is associated with worse outcomes in acute kidney injury after major abdominal surgery. (IF=19.334, R/C=5/49, CRITICAL CARE MEDICINE)

**Guang-Huar Young**, Han-Min Chen, Chi-Tsai Lin, Kuang-Ching Tseng, Jiann-Shing Wu, Rong-Huay Juang. *Planta* 2006 Feb 223:468-478. Site-specific phosphorylation of L-form starch phosphorylase by the protein kinase activity from sweet potato roots. (IF=4.540, R/C=42/259, PLANT SCIENCES).

#### Awards

1. The 80th American Diabetes Association (2020). Moderated Poster Presentation & Virtual highlights (<https://2020.adahighlights.com/>)
2. The Internal Stroke Conference 2018. Moderated Poster Presentation.
3. The 1st International Congress of Chinese/ Nephrologist (ICCN2015) Highlighted Poster for the Best Poster Award.