

NHRI Publication _April 2021

Institute of Biomedical Engineering and Nanomedicine

1. Liang, YJ; Yang, IH; Lin, YW; Lin, JN; Wu, CC; Chiang, CY; Lai, KH; Lin, FH. [Curcumin-loaded hydrophobic surface-modified hydroxyapatite as an antioxidant for sarcopenia prevention](#). *Antioxidants*. 2021 Apr 16; 10(4): Article number 616.
2. Chiu, TM; Hsu, PC; Khan, MY; Lin, CJ; Lee, CH; Hsu, TC; Chen, MH; Hanagata, N. [A perspective on imiquimod microneedles for treating warts](#). *Pharmaceutics*. 2021 Apr 22; 13(5): Article number 607.
3. Chen, YC; Liu, HC; Lin, FH; Chang, CH. [Development of engineered cartilage product from bone marrow mesenchymal stem cells: An example in Taiwan](#). *Journal of Musculoskeletal Research*. 2021 Mar; 24(1): Article number 2130001.
4. Thacker, M; Chen, YN; Lin, CP; Lin, FH. [Nitrogen-doped titanium dioxide mixed with calcium peroxide and methylcellulose for dental bleaching under visible light activation](#). *International Journal of Molecular Sciences*. 2021 Apr 4; 22(7): Article number 3759.
5. Chen, YW; Lee, YY; Lin, CF; Pan, PS; Chen, JK; Wang, CW; Hsu, SM; Kuo, YC; Lan, TL; Hsu, SPC; Liang, ML; Chen, RH; Chang, FC; Wu, CC; Lin, SC; Liang, HK; Lee, JC; Chen, SK; Liu, HM; Peir, JJ; Lin, KH; Huang, WS; Chen, KH; Kang, YM; Liou, SC; Wang, CC; Pai, PC; Li, CW; Chiek, DQS; Wong, TT; Chiou, SH; Chao, Y; Tanaka, H; Chou, FI; Ono, K. [Salvage boron neutron capture therapy for malignant brain tumor patients in compliance with emergency and compassionate use: Evaluation of 34 cases in Taiwan](#). *Biology*. 2021 Apr 15; 10(4): Article number 334.

Institute of Biotechnology and Pharmaceutical Research

1. Chen, T; Fei, CY; Chen, YP; Sargsyan, K; Chang, CP; Yuan, HS; Lim, C. [Synergistic inhibition of SARS-CoV-2 replication using disulfiram/ebselen and remdesivir](#). *ACS Pharmacology and Translational Science*. 2021 Apr 9; 4(2): 898-907.

Institute of Cellular and Systems Medicine

1. Pao, YP; Yu, CC; Lin, YZ; Chatterjee, S; Saha, S; Tiwari, N; Huang, YT; Wu, CC; Choi, D; Lin, ZH. [Carbohydrate-protein interactions studied by solid-liquid contact electrification and its use for label-free bacterial detection](#). *Nano Energy*. 2021 Jul; 85: Article number 106008.
2. Wu, KK. [Cytoguardin: A tryptophan metabolite against cancer growth and metastasis](#). *International Journal of Molecular Sciences*. 2021 Apr 23; 22(9): Article number 4490.
3. Lai, JH; Hung, LF; Huang, CY; Wu, DW; Wu, CH; Ho, LJ. [Mitochondrial protein CMPK2 regulates IFN alpha-enhanced foam cell formation, potentially contributing to premature atherosclerosis in SLE](#). *Arthritis Research and Therapy*. 2021 Apr 19; 23: Article number 120.

Institute of Molecular and Genomic Medicine

1. Chen, CL; Hsu, SC; Chung, TY; Chu, CY; Wang, HJ; Hsiao, PW; Yeh, SD; Ann, DK; Yen, Y; Kung, HJ. [Arginine is an epigenetic regulator targeting TEAD4 to modulate OXPHOS in prostate cancer cells](#). *Nature Communications*. 2021 Apr 23; 12: Article number 2398.
2. Lan, YT; Chang, SC; Lin, PC; Lin, CC; Lin, HH; Huang, SC; Lin, CH; Liang, WY; Chen, WS; Jiang, JK; Yang, SH; Lin, JK. [Clinicopathological and molecular features of patients with early and late recurrence after curative surgery for colorectal cancer](#). *Cancers*. 2021 Apr 14; 13(8): Article number 1883.
3. Huang, YL; Shen, ZQ; Huang, CH; Teng, YC; Lin, CH; Tsai, TF. [Cisd2 protects the liver from oxidative stress and ameliorates western diet-induced nonalcoholic fatty liver disease](#). *Antioxidants*. 2021 Apr 3; 10(4): Article number 559.

Institute of Population Health Sciences

1. Chang, CY; Wu, MS; Chang, CH; Lin, CC; Lin, HL; Kao, CC; Chen, HH; Li, A; Hsu, CC; Lin, YC. [Effect of dialyzer membranes on mortality in uremic patients undergoing long-term hemodialysis: A nationwide population-based study using the Taiwan dialysis registry data system 2005-2012](#). *Therapeutic Apheresis and Dialysis*. 2021 Apr 29; Article in Press.

2. Kamiza, AB; Wang, WC; You, JF; Tang, R; Chien, HT; Lai, CH; Chiu, LL; Lo, TP; Hung, KY; Hsiung, CA; Yeh, CC. [Cumulative risks of colorectal cancer in Han Chinese patients with Lynch syndrome in Taiwan](#). *Scientific Reports*. 2021 Apr 26; 11: Article number 8899.
3. Yerukala Sathipati, S; Ho, SY. [Identification and characterization of species-specific severe acute respiratory syndrome coronavirus 2 physicochemical properties](#). *Journal of Proteome Research*. 2021 Apr 15; Article in Press.
4. Lo, WC; Wang, FC; Lin, LY; Jyan, HW; Wu, HC; Huang, YL; Parng, IM; Chiou, HY. [Enhancing data linkage to break the chain of coronavirus spread: The Taiwan experience](#). *Journal of Medical Internet Research*. 2021 Apr 15; Article in Press.
5. Yao, TC; Wang, JY; Chang, SM; Chang, YC; Tsai, YF; Wu, AC; Huang, JL; Tsai, HJ. [Association of oral corticosteroid bursts with severe adverse events in children](#). *JAMA Pediatrics*. 2021 Apr 19; Article in Press.
6. Lee, SH; Tseng, WC; Du, ZY; Lin, WY; Chen, MH; Lin, CC; Lien, GW; Liang, HJ; Wen, HJ; Guo, YL; Chen, PC; Lin, CY. [Lipid responses to environmental perfluoroalkyl substance exposure in a Taiwanese child cohort](#). *Environmental Pollution*. 2021 Aug 15; 283: Article number 117007.
7. Chung, RH; Chiu, YF; Wang, WC; Hwu, CM; Hung, YJ; Lee, IT; Chuang, LM; Quertermous, T; Rotter, JI; Chen, YDI; Chang, IS; Hsiung, CA. [Multi-omics analysis identifies CpGs near G6PC2 mediating the effects of genetic variants on fasting glucose](#). *Diabetologia*. 2021 Apr 12; Article in Press.
8. Chen, YT; Liu, CL; Chen, CJ; Chen, MH; Chen, CY; Tsao, PN; Chou, HC; Chen, PC. [Response to "How can the term SIDS be used without the application of standard definitions?"](#). *Chemosphere*. 2021 Apr 3; 274: Article number 130461.
9. Wu, SY; Yeh, NH; Chang, HY; Wang, CF; Hung, SY; Wu, SJ; Pan, WH. [Adequate protein intake in older adults in the context of frailty: Cross-sectional results of the Nutrition and Health Survey in Taiwan 2014-2017](#). *American Journal of Clinical Nutrition*. 2021 Apr 13.
10. Sathipati, SY; Ho, SY. [Identification of the miRNA signature associated with survival in patients with ovarian cancer](#). *Aging*. 2021 Apr 27; Article in Press.
11. Guo, SM; Liu, YT; He, SR; Wu, MS; Tseng, WT; Wu, RC; Wu, IC. [Differential](#)

[relationship of uric acid to mortality and clinical biomarkers of aging according to grip strength in older adults: A cohort study](#). *Aging*. 2021 Apr 4; 13(7): 10555-10583.

National Institute of Cancer Research

1. Lee, PH; Yang, TY; Chen, KC; Huang, YH; Tseng, JS; Hsu, KH; Wu, YC; Liu, KJ; Chang, GC. [Higher CD4/CD8 ratio of pleural effusion predicts better survival for lung cancer patients receiving immune checkpoint inhibitors](#). *Scientific Reports*. 2021 Apr 30; 11: Article number 9381.
2. Chang, JS; Chen, LT; Shan, YS; Chu, PY; Tsai, CR; Tsai, HJ. [An updated analysis of the epidemiologic trends of neuroendocrine tumors in Taiwan](#). *Scientific Reports*. 2021 Apr 12; 11: Article number 7881.
3. Lin, HY; Chu, PY. [Advances in understanding mitochondrial microRNAs \(mitomiRs\) on the pathogenesis of triple-negative breast cancer \(TNBC\)](#). *Oxidative Medicine and Cellular Longevity*. 2021 Mar 21; 2021: Article number 5517777.
4. Haron, N; Rajendran, S; Kallarakkal, TG; Zain, RB; Ramanathan, A; Abraham, MT; Lau, SH; Cheng, LC; Chong, SMY; Mohamed Azahar, FA; Mohamad Zaini, Z; Chan, SW; Goh, YC; Lim, D; Khairi, J; Zainal Abidin, M; Abdul Rahman, ZA; Liew, CS; Fong, SC; Yang, YH; Ismail, SM; Cheong, SC. [High referral accuracy for oral cancers and oral potentially malignant disorders using telemedicine](#). *Oral Diseases*. 2021 Apr 29; Article in Press.
5. Wang, YY; Chen, YK; Lo, S; Chi, TC; Chen, YH; Hu, SC; Chen, YW; Jiang, SS; Tsai, FY; Liu, W; Li, RN; Hsieh, YC; Huang, CJ; Yuan, SS. [MRE11 promotes oral cancer progression through RUNX2/CXCR4/AKT/FOXA2 signaling in a nuclease-independent manner](#). *Oncogene*. 2021 Apr 29; Article in Press.
6. Li, CJ; Lin, LT; Chu, PY; Chiang, AJ; Tsai, HW; Chiu, YH; Huang, MS; Wen, ZH; Tsui, KH. [Identification of novel biomarkers and candidate drug in ovarian cancer](#). *Journal of Personalized Medicine*. 2021 Apr 19; 11(4): Article number 316.
7. Hsieh, MJ; Weng, CC; Lin, YC; Wu, CC; Chen, LT; Cheng, KH. [Inhibition of Beta-catenin activity abolishes LKB1 loss-driven pancreatic cystadenoma in mice](#). *International Journal of Molecular Sciences*. 2021 Apr 28; 22(9): Article number 4649.

8. Lee, YH; Chang, YH; Ku, LJE; Wu, JS; Isfandiari, MA; Chou, LP; Li, CY. [Associations of physician characteristics with sex difference in ischemic heart disease incidence among patients living with type 2 diabetes in Taiwan](#). *Healthcare (Switzerland)*. 2021 Apr 8; 9(4): Article number 440.
9. Tai, CJ; Yang, YH; Tseng, TG; Chang, FR; Wang, HC. [Association between digoxin use and cancer incidence: A propensity score-matched cohort study with competing risk analysis](#). *Frontiers in Pharmacology*. 2021 Mar 31; 12: Article number 564097.
10. Li, CC; Chen, CY; Chou, YH; Huang, CJ; Ku, HY; Chien, CR. [Chemotherapy alone versus definitive concurrent chemoradiotherapy for cT4b esophageal squamous cell carcinoma: A population-based study](#). *BMC Gastroenterology*. 2021 Apr 7; 21: Article number 153.

National Institute of Environmental Health Sciences

1. Tseng, CH. [The effect of metformin on male reproductive function and prostate: An updated review](#). *The World Journal of Men's Health*. 2021 Mar 9; 39: Article number e15.
2. Chen, K; Breitner, S; Wolf, K; Stafoggia, M; Sera, F; Vicedo-Cabrera, AM; Guo, Y; Tong, S; Lavigne, E; Matus, P; Valdés, N; Kan, H; Jaakkola, JJK; Rytö, NRI; Huber, V; Scortichini, M; Hashizume, M; Honda, Y; Nunes, B; Madureira, J; Holobacă, IH; Fratianne, S; Kim, H; Lee, W; Tobias, A; Íñiguez, C; Forsberg, B; Åström, C; Ragettli, MS; Guo, YLL; Chen, BY; Li, S; Milojevic, A; Zanobetti, A; Schwartz, J; Bell, ML; Gasparri, A; Schneider, A. [Ambient carbon monoxide and daily mortality: A global time-series study in 337 cities](#). *Lancet Planetary Health*. 2021 Apr; 5(4): e191-e199.
3. Chew, Y; Chung, HY; Lin, PY; Wu, DC; Huang, SK; Kao, MC. [Outer membrane vesicle production by helicobacter pylori represents an approach for the delivery of virulence factors caga, vaca and urea into human gastric adenocarcinoma \(Ags\) cells](#). *International Journal of Molecular Sciences*. 2021 Apr 11; 22(8): Article number 3942.
4. Huang, PC; Kuo, PL; Chang, WH; Shih, SF; Chang, WT; Lee, CC. [Prenatal phthalates exposure and cord thyroid hormones: A birth cohort study in southern Taiwan](#). *International Journal of Environmental Research and Public Health*. 2021 Apr 19; 18(8): Abstract number 4323.

5. Han, L; Kaushal, A; Zhang, H; Kadalayil, L; Duan, J; Holloway, JW; Karmaus, W; Banerjee, P; Tsai, SF; Wen, HJ; Arshad, SH; Wang, SL. [DNA methylation at birth is associated with childhood serum immunoglobulin E levels](#). *Epigenetics Insights*. 2021 Apr 5; Article in Press.
6. Zou, ML; Jiang, CB; Chen, YH; Wu, CD; Candice Lung, SC; Chien, LC; Kallawicha, K; Yang, YT; Lo, YC; Chao, HJ. [Effects of air pollution, land-use type, and maternal mental health on child development in the first two years of life in the Greater Taipei area](#). *Environmental Research*. 2021 Apr 12; 197: Article number 111168.
7. Chang, HT; Wu, CD; Wang, JD; Chen, PS; Su, HJ. [Residential green space structures are associated with a lower risk of bipolar disorder: A nationwide population-based study in Taiwan](#). *Environmental Pollution*. 2021 Aug 15; 283: Article number 115864.
8. Wang, LT; Lin, MH; Liu, KY; Chiou, SS; Wang, SN; Chai, CY; Tseng, LW; Chiou, HYC; Wang, HC; Yokoyama, KK; Hsu, SH; Huang, SK. [WLS/wntless is essential in controlling dendritic cell homeostasis via a WNT signaling-independent mechanism](#). *Autophagy*. 2021 Apr 14; Article in Press.

National Institute of Infectious Diseases and Vaccinology

1. Li, HH; Li, JC; Su, MP; Liu, KL; Chen, CH. [Generating mutant Aedes aegypti mosquitoes using the CRISPR/Cas9 system](#). *STAR Protocols*. 2021 Jun 18; 2(2): Article number 100432.
2. Huang, YC; Chen, CJ; Lauderdale, TLY. [Detection, spread and phylogeny of meticillin-resistant Staphylococcus aureus sequence type 45 in Taiwan](#). *Microbial Genomics*. 2021 Apr 12; 7(4): Article number 000555.
3. Lee, YT; Huang, TW; Liu, IF; Kuo, SC; Yang, YS; Lin, PY; Liu, CP; Liu, YM; Chen, TL; Wang, FD; Wang, YC. [The prediction values of carbapenemase detection methods and carbapenem susceptibility testing for clinical outcomes of patients with Acinetobacter bacteremia under carbapenem treatment](#). *Journal of Microbiology, Immunology and Infection*. 2021 Apr 5; Article in Press

Center for Neuropsychiatric Research

1. Chou, PH; Lin, YF; Lu, MK; Chang, HA; Chu, CS; Chang, WH; Kishimoto, T; Sack, AT; Su, KP. [Personalization of repetitive transcranial magnetic stimulation for the treatment of major depressive disorder according to the existing psychiatric comorbidity](#). *Clinical Psychopharmacology and Neuroscience*. 2021 May 31; 19(2): 190-205.
2. Henderson, MJ; Trychta, KA; Yang, SM; Bäck, S; Yasgar, A; Wires, ES; Danchik, C; Yan, X; Yano, H; Shi, L; Wu, KJ; Wang, AQ; Tao, D; Zahoránszky-Kóhalmi, G; Hu, X; Xu, X; Maloney, D; Zakharov, AV; Rai, G; Urano, F; Airavaara, M; Gavrilova, O; Jadhav, A; Wang, Y; Simeonov, A; Harvey, BK. [A target-agnostic screen identifies approved drugs to stabilize the endoplasmic reticulum-resident proteome](#). *Cell Reports*. 2021 Apr 27; 35(4): Article number 109040.

Graduate Student Program

1. Ajoy, R; Lo, YC; Ho, MH; Chen, YY; Wang, Y; Chen, YH; Jing-Yuan, C; Changou, CA; Hsiung, YC; Chen, HM; Chang, TH; Lee, CY; Chiang, YH; Chang, WC; Hoffer, B; Chou, SY. [CCL5 promotion of bioenergy metabolism is crucial for hippocampal synapse complex and memory formation](#). *Molecular Psychiatry*. 2021 Apr 30; Article in Press.
2. Kao, CC; Wong, HS; Wang, YJ; Chou, WH; Perwitasari, DA; Wu, MS; Chang, WC. [The role of genetic polymorphisms in STIM1 and ORAI1 for erythropoietin resistance in patients with renal failure](#). *Medicine*. 2021 Apr 30; 100(17): Article number e25243.

Computer and Information Center

1. Lai, SC; Cheng, JC; Chuang, YH. [On the retention rate of top talkers for sampled netflow](#). *Journal of Internet Technology*. 2021 Mar; 22(2): 457-463.