

NHRI Publication _JUNE 2021

Institute of Biomedical Engineering and Nanomedicine

1. Liang, SK; Hsu, CC; Song, HL; Huang, YC; Kuo, CW; Yao, X; Li, CC; Yang, HC; Hung, YL; Chao, SY; Wu, SC; Tsai, FR; Chen, JK; Liao, WN; Cheng, SC; Tsou, TC; Wang, IC. [FOXM1 is required for small cell lung cancer tumorigenesis and associated with poor clinical prognosis](#). Oncogene. 2021 Jun 21; Article in Press.
2. Wu, SK; Chiang, CF; Hsu, YH; Liou, HC; Fu, WM; Lin, WL. [Pulsed-wave low-dose ultrasound hyperthermia selectively enhances nanodrug delivery and improves antitumor efficacy for brain metastasis of breast cancer\[Erratum: Ultrasonics Sonochemistry. 2017 May; 36: 198-205.\]](#). Ultrasonics Sonochemistry. 2021 Jun 19; Article in Press.
3. Wang, Y; Jhang, DF; Tsai, CH; Chiang, NJ; Tsao, CH; Chuang, CC; Chen, LT; Wayne Chang, WS; Liao, LD. [In vivo assessment of hypoxia levels in pancreatic tumors using a dual-modality ultrasound/photoacoustic imaging system](#). Micromachines. 2021 Jun 7; 12(6): Article number 668.

Institute of Biotechnology and Pharmaceutical Research

1. Tseng, PH; Sie, ZL; Liu, MC; Lin, HS; Yang, WY; Lin, TY; Hsieh, HP; Hung, SC; Cheng, CL; Wang, HD; Chang, HH; Yuh, CH. [Identification of two novel small compounds that inhibit liver cancer formation in zebrafish and analysis of their conjugation to nanodiamonds to further reduce toxicity](#). Advanced Therapeutics. 2019 Oct 8; 2(12): Article number 1900105.
2. Kant, R; Yang, MH; Tseng, CH; Yen, CH; Li, WY; Tyan, YC; Chen, M; Tzeng, CC; Chen, WC; You, K; Wang, WC; Chen, YL; Chen, YAM. [Discovery of an orally efficacious MYC inhibitor for liver cancer using a GNMT-Based High-Throughput screening system and structure-activity relationship analysis](#). Journal of Medicinal Chemistry. 2021 Jun 16; Article in Press.

3. Chen, T; Fei, CY; Chen, YP; Sargsyan, K; Liang, JJ; Liao, CC; Lin, YL; Chang, CP; Yuan, HS; Lim, C. [Synergistic inhibition of SARS-CoV-2 replication using disulfiram/ebselen and remdesivir](#)[Erratum: ACS Pharmacology and Translational Science. 2021 Apr 9; 4(2): 898-907.]. ACS Pharmacology and Translational Science. 2021 Jun 11; 4(3): Article number 1246.

Institute of Cellular and Systems Medicine

1. Hsu, SC; Chen, CL; Cheng, ML; Chu, CY; Changou, CA; Yu, YL; Yeh, SD; Kuo, TC; Kuo, CC; Chuu, CP; Li, CF; Wang, LH; Chen, HW; Yen, Y; Ann, DK; Wang, HJ; Kung, HJ. [Arginine starvation elicits chromatin leakage and cGAS-STING activation via epigenetic silencing of metabolic and DNA-repair genes](#). Theranostics. 2021 Jun 4; 11(15): 7527-7545.
2. Lai, JH; Wu, DW; Wu, CH; Hung, LF; Huang, CY; Ka, SM; Chen, A; Chang, ZF; Ho, LJ. [Mitochondrial CMPK2 mediates immunomodulatory and antiviral activities through IFN-dependent and IFN-independent pathways](#). iScience. 2021 Jun 25; 24(6): Article number 102498.
3. Hsu, WT; Tseng, YH; Jui, HY; Kuo, CC; Wu, KK; Lee, CM. [5-Methoxytryptophan attenuates postinfarct cardiac injury by controlling oxidative stress and immune activation](#). [Journal of Molecular and Cellular Cardiology](#). 2021 Sep; 158: 101-114.
4. Lin, SH; Papadakis, CM; Kang, JJ; Lin, JM; Hsu, SH. [Injectable phenolic-chitosan self-healing hydrogel with hierarchical micelle architectures and fast adhesiveness](#). [Chemistry of Materials](#). 2021 May 12; 33(11): 3945-3958.
5. Siao, AC; Shih, LJ; Lin, YY; Tsuei, YW; Kuo, YC; Ku, HC; Chuu, CP; Hsiao, PJ; Kao, YH. [Investigation of the molecular mechanisms by which endothelin-3 stimulates preadipocyte growth](#). Frontiers in Endocrinology. 2021 May 21; 12: Article number 661828.

Institute of Molecular and Genomic Medicine

1. Tseng, PH; Sie, ZL; Liu, MC; Lin, HS; Yang, WY; Lin, TY; Hsieh, HP; Hung, SC; Cheng,

- CL; Wang, HD; Chang, HH; Yuh, CH. [Identification of two novel small compounds that inhibit liver cancer formation in zebrafish and analysis of their conjugation to nanodiamonds to further reduce toxicity](#). *Advanced Therapeutics*. 2019 Oct 8; 2(12): Article number 1900105.
2. Hsu, SC; Chen, CL; Cheng, ML; Chu, CY; Changou, CA; Yu, YL; Yeh, SD; Kuo, TC; Kuo, CC; Chuu, CP; Li, CF; Wang, LH; Chen, HW; Yen, Y; Ann, DK; Wang, HJ; Kung, HJ. [Arginine starvation elicits chromatin leakage and cGAS-STING activation via epigenetic silencing of metabolic and DNA-repair genes](#). *Theranostics*. 2021 Jun 4; 11(15): 7527-7545.
 3. Lan, YZ; Chang, SC; Lin, PC; Lin, CH; Liang, WY; Chen, WON; Jiang, EK; Yang, SHR; Lin, JK. [High concordance of mutation patterns in 10 common mutated genes between tumor tissue and cell-free DNA in metastatic colorectal cancer](#). *American Journal of Cancer Research*. 2021 May 15; 11(5): 2228-2237.
 4. Huang, SH; Irawati, N; Chien, YF; Lin, JY; Tsai, YH; Wang, PY; Chu, LA; Li, ML; Chiang, AS; Tsia, KK; Chu, SW. [Optical volumetric brain imaging: Speed, depth, and resolution enhancement](#). *Journal of Physics D-Applied Physics*. 2021 Jun 1; 54(32): Article number 323002.
 5. Chung, MY; Chen, SJ; Jiang, YJ. [Phenotype variability in the patients of familial exudative vitreoretinopathy: The RCBTB1 case](#). *Current Eye Research*. 2021 Jun 14; Article in Press.

Institute of Population Health Sciences

1. Sofer, T; Zheng, X; Laurie, CA; Gogarten, SM; Brody, JA; Conomos, MP; Bis, JC; Thornton, TA; Szpiro, A;; et al. [Variant-specific inflation factors for assessing population stratification at the phenotypic variance level](#). *Nature Communications*. 2021 Jun 9; 12: Article number 3506.
2. Lin, YH; Wu, MH; Liu, YC; Lyu, PC; Yeh, CT; Lin, KH. [LINC01348 suppresses hepatocellular carcinoma metastasis through inhibition of SF3B3-mediated EZH2 pre-mRNA splicing](#). *Oncogene*. 2021 Jun 17; Article in Press.
3. Hsieh, WT; Hsu, MH; Lin, WJ; Xiao, YC; Lyu, PC; Liu, YC; Lin, WY; Kuo, YH; Chung,

- JG. [Ergosta-7, 9 \(11\), 22-trien-3Beta-ol interferes with lps docking to lbp, cd14, and tlr4/md-2 co-receptors to attenuate the nf-kappab inflammatory pathway in vitro and drosophila](#). International Journal of Molecular Sciences. 2021 Jun 17; 22(12): Article number 6511.
4. Lin, TY; Liao, SH; Lai, CC; Paci, E; Chuang, SY. [Effectiveness of non-pharmaceutical interventions and vaccine for containing the spread of COVID-19: Three illustrations before and after vaccination periods](#). Journal of the Formosan Medical Association. 2021 Jun; 120, Suppl. 1: S46-S56.
 5. Yen, FS; Wei, CC; Liu, JS; Hsu, CC; Hwu, CM. [Outcomes of second-line oral antidiabetic drugs in persons with young-onset type 2 diabetes](#). Diabetes Research and Clinical Practice. 2021 Jul; 177: Article number 108928.
 6. Hsieh, SW; Huang, LC; Hsieh, TJ; Lin, CF; Hsu, CC; Yang, YH. [Behavioral and psychological symptoms in institutional residents with dementia in Taiwan](#). Geriatrics and Gerontology International. 2021 Jun 28; Article in Press.
 7. Lin, Y; Yerukala Sathipati, S; Ho, SY. [Predicting the risk genes of autism spectrum disorders](#). Frontiers in Genetics. 2021 Jun 14; 12: Article number 665469.
 8. Chen, CL; Lai, CC; Luh, DL; Chuang, SY; Yang, KC; Yeh, YP; Yen, AMF; Chang, KJ; Chang, RE; Li-Sheng Chen, S. [Review of epidemic, containment strategies, clinical management, and economic evaluation of COVID-19 pandemic](#). Journal of the Formosan Medical Association. 2021 Jun; 120, Suppl. 1: S6-S18.
 9. Lin, FJ; Huang, YC; Huang, YC; Huang, LM; Liu, CC; Chi, H; Lin, HC; Ho, YH; Wu, FT; Mu, JJ; Hsiung, CA; Huang, CY; Shih, SM; Taiwan Pediatric Infectious Disease Alliance. [Clinical and epidemiological features in hospitalized young children with acute gastroenteritis in Taiwan: A multicentered surveillance through 2014-2017](#). Journal of the Formosan Medical Association. 2021 Jun 21; Article in Press.
 10. Yen, FS; Lai, JN; Wei, JCC; Chiu, LT; Hsu, CC; Hou, MC; Hwu, CM. [Is insulin the preferred treatment in persons with type 2 diabetes and liver cirrhosis?](#) BMC Gastroenterology. 2021 Jun 12; 21: Article number 263.

National Institute of Cancer Research

1. Hsu, SC; Chen, CL; Cheng, ML; Chu, CY; Changou, CA; Yu, YL; Yeh, SD; Kuo, TC; Kuo, CC; Chuu, CP; Li, CF; Wang, LH; Chen, HW; Yen, Y; Ann, DK; Wang, HJ; Kung, HJ. [Arginine starvation elicits chromatin leakage and cGAS-STING activation via epigenetic silencing of metabolic and DNA-repair genes.](#) *Theranostics*. 2021 Jun 4; 11(15): 7527-7545.
2. Yang, YC; Huang, RY; Tsai, HJ; Li, PC; Yang, YH; Hsieh, KP. [Cardiovascular events in patients with chronic myeloid leukaemia treated with tyrosine kinase inhibitors in Taiwan: A nationwide population-based study.](#) *European journal of preventive cardiology*. 2021 Jun 28; Article in Press.
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4. Chen, TJ; Chan, TC; Li, WS; Li, CF; Ke, HL; Wei, YC; Wu, WJ; Li, WM. [Utility of efemp1 in the prediction of oncologic outcomes of urothelial carcinoma.](#) *Genes*. 2021 Jun 6; 12(6): Article number 872.
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7. Yang, YL; Tsai, MC; Chang, YH; Wang, CC; Chu, PY; Lin, HY; Huang, YH. [MIR29A impedes metastatic behaviors in hepatocellular carcinoma via targeting LOX, LOXL2, and VEGFA.](#) *International Journal of Molecular Sciences*. 2021 Jun 1; 22(11): Article number 6001.
8. Huang, SS; Liao, WY; Hsu, CC; Chan, TS; Liao, TY; Yang, PM; Chen, LT; Sung, SY; Tsai, KK. [A novel invadopodia-specific marker for invasive and pro-metastatic cancer stem cells.](#) *Frontiers in Oncology*. 2021 May 31; 11: Article number 638311.

9. Wang, Y; Jhang, DF; Tsai, CH; Chiang, NJ; Tsao, CH; Chuang, CC; Chen, LT; Wayne Chang, WS; Liao, LD. [In vivo assessment of hypoxia levels in pancreatic tumors using a dual-modality ultrasound/photoacoustic imaging system](#). Micromachines. 2021 Jun 7; 12(6): Article number 668.

National Institute of Environmental Health Sciences

1. Vicedo-Cabrera, AM; Scovronick, N; Sera, F; Roye, D; Schneider, R; Tobias, A; et al. [The burden of heat-related mortality attributable to recent human-induced climate change](#). Nature Climate Change. 2021 May 31; 11(6): 492-500.
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National Institute of Infectious Diseases and Vaccinology

1. Ho, HM; Huang, CY; Cheng, YJ; Chen, IH; Liu, SJ; Huang, CH; Huang, MH. [Squalene nanoemulsion reinforces mucosal and immunological fingerprints following intravaginal delivery](#). *Biomedicine and Pharmacotherapy*. 2021 Sep; 141: Article number 111799.
2. Wang, TC; Lin, JC; Chang, JC; Hiaso, YW; Wang, CH; Chiu, S; Fung, CP; Chang, FY; Siu, LK. [Virulence among different types of hypervirulent *Klebsiella pneumoniae* with multi-locus sequence type \(MLST\)-11, Serotype K1 or K2 strains](#). *Gut Pathogens*. 2021 Jun 22; 13: Article number 40.
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4. Chen, YH; Wang, Y; Liao, CH; Hsu, SC. [The potential of adoptive transfer of gamma9delta2 T cells to enhance blinatumomab's antitumor activity against B-cell malignancy](#). *Scientific Reports*. 2021 Jun 11; 11: Article number 12398.
5. Chang, CC; Yang, MH; Chang, SM; Hsieh, YJ; Lee, CH; Chen, YA; Yuan, CH; Chen, YL; Ho, SY; Tyan, YC. [Clinical significance of olfactory dysfunction in patients of COVID-](#)

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Center for Neuropsychiatric Research

1. Hung, WT; Hung, SI; Chen, YM; Hsieh, CW; Chen, HH; Tang, KT; Chen, DY; Lan, TH. [The association of ATG16L1 variations with clinical phenotypes of adult-onset still's disease](#). Genes. 2021 Jun 11; 12(6): Article number 904.
2. Chiu, TF; Yu, TM; Chiu, CW; Lee, BK; Lan, TH; Li, CY; Lin, MC; Kao, CH. [Increased risk of pulmonary and extrapulmonary tuberculosis infection in patients with polycystic kidney disease: A nationwide population-based study with propensity score-matching analysis](#). Journal of Translational Medicine. 2021 Jun 9; 19: Article number 253.
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Immunology Research Center

1. Lin, CC; Shen, YR; Chang, CC; Guo, XY; Young, YY; Lai, TY; Yu, IS; Lee, CY; Chuang, TH; Tsai, HY; Hsu, LC. [Terminal uridyltransferase 7 regulates TLR4-triggered inflammation by controlling Regnase-1 mRNA uridylation and degradation](#). Nature Communications. 2021 Jun 29; 12: Article number 3878.
2. Wang, S; Ma, L; Wang, Z; He, H; Chen, H; Duan, Z; Li, Y; Si, Q; Chuang, TH; Chen, C; Luo, Y. [Lactate Dehydrogenase-A \(LDH-A\) preserves cancer stemness and recruitment of tumor-associated macrophages to promote breast cancer progression](#). Frontiers in Oncology. 2021 Jun 10; 11: Article number 654452.
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Graduate Student Program

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2. Tsai, CY; Ko, HJ; Chiou, SJ; Lai, YL; Hou, CC; Javaria, T; Huang, ZY; Cheng, TS; Hsu, TI; Chuang, JY; Kwan, AL; Chuang, TH; Huang, CYF; Loh, JK; Hong, YR. [NBM-BMX, an HDAC8 inhibitor, overcomes temozolomide resistance in glioblastoma multiforme by downregulating the beta-Catenin-Myc/SOX2 pathway and upregulating p53-mediated MGMT inhibition](#). International Journal of Molecular Sciences. 2021 May 31; 22(11): Article number 5907.
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4. Tsai, CY; Ko, HJ; Huang, CYF; Lin, CY; Chiou, SJ; Su, YF; Lieu, AS; Loh, JK; Kwan, AL; Chuang, TH; Hong, YR. [Ionizing radiation induces resistant glioblastoma stem-like cells by promoting autophagy via the Wnt/beta-Catenin pathway](#). Life-Basel. 2021 May 18; 11(5): Article number 451.