

## NHRI Publication \_October 2020

### Institute of Biomedical Engineering and Nanomedicine

1. Chuang, HC; Chen, YY; Hsiao, TC; Chou, HC; Kuo, HP; Feng, PH; Ho, SC; Chen, JK; Chuang, KJ; Lee, KY. [Alteration in angiotensin-converting enzyme 2 by PM\(1\) during the development of emphysema in rats](#). *ERJ Open Research*. 2020 Oct; 6(4): Article number 00174-2020.
2. hChen, TY; Chen, MR; Liu, SW; Lin, JY; Yang, YT; Huang, HY; Chen, JK; Yang, CS; Lin, KM. [Assessment of polyethylene glycol-coated gold nanoparticle toxicity and inflammation in vivo using NF-kappaB reporter mice](#). *International Journal of Molecular Sciences*. 2020 Oct 31; 21(21): Article number 8158.
3. Luo, Y. H.; Cheng, H. J.; Tsai, F. Y.; Tsou, T. C.; Lin, S. Y.; Lin, P. [Primary amine modified gold nanodots regulate macrophage function and antioxidant response: Potential therapeutics targeting of Nrf2](#). *International Journal of Nanomedicine*. 2020 Oct 29; 15:8411-8426.
4. Fang, CH; Lin, YW; Yang, CC; Thacker, M; Jakfer, S; Lin, FH. [Characterization and evaluation of porous hydroxyapatite synthesized by oil-in-water method as carrier of donepezil for the preventive of Alzheimer's disease by controlled release](#). *Journal of Asian Ceramic Societies*. 2020 Oct 21; Article in Press.
5. , JY; Abd-Elrehim, T; Lin, CC; Chen, GS. [Feasibility study of greater occipital nerve blocks by focused ultrasound - an animal study](#). *Journal of Neural Engineering*. 2020 Nov 4; 17(5): Article number 056030.
6. Chen, ZY; Chen, SH; Chen, CH; Chou, PY; Yang, CC; Lin, FH. [Polysaccharide extracted from \*Bletilla striata\* promotes proliferation and migration of human tenocytes](#). *Polymers*. 2020 Nov 1; 12(11): Article number 2567.

### Institute of Biotechnology and Pharmaceutical Research

1. Wang, HC; Huang, PN; Hung, HC; Tseng, SN; Chang, CC; Tsai, YR; Wang, YM; Shih, SR; Hsu, JT. [Effect of a neuropilin-1-derived virus receptor trap on enterovirus A71 infection in vitro](#). *Antimicrobial Agents and Chemotherapy*. 2020 Nov 2; Article in Press.
2. Yang, CW; Hsu, HY; Chang, HY; Lee, YZ; Lee, SJ. [Natural cardenolides suppress coronaviral replication by downregulating JAK1 via a Na\(+\)/K\(+\)-ATPase independent proteolysis](#)[Erratum:*Biochemical Pharmacology*. 2020 Oct; 180: Article number 114122.]. *Biochemical Pharmacology*. 2020 Dec; 182: Article number 114287.
3. Lai, ZS; Yeh, TK; Chou, YC; Hsu, T; Lu, CT; Kung, FC; Hsieh, MY; Lin, CH; Chen, CT; James Shen, CK; Jiaang, WT. [Potent and orally active purine-based fetal hemoglobin inducers for treating Beta-thalassemia and sickle cell disease](#). *European Journal of Medicinal Chemistry*. 2020 Oct 16; Article in Press.
4. Tsou, LK; Yeh, SH; Ueng, SH; Chang, CP; Song, JS; Wu, MH; Chang, HF; Chen, SR; Shih, C; Chen, CT; Ke, YY. [Comparative study between deep learning and QSAR classifications for TNBC inhibitors and novel GPCR agonist discovery](#). *Scientific Reports*. 2020 Oct 8; 10: Article number 16771.
5. Chen, YY; Lo, CF; Chiu, TY; Hsu, CY; Yeh, TK; Chen, CP; Huang, CL; Huang, CY; Wang, MH; Huang, YC; Ho, HH; Chao, YS; Shih, JC; Tsou, LK; Chen, CT. [BPRDP056, a novel small molecule drug conjugate specifically targeting phosphatidylserine for cancer therapy](#). *Translational Oncology*. 2021 Jan; 14(1): Article number 100897.

### Institute of Cellular and Systems Medicine

1. Wang, LT; Ma, KS. [Correspondence to 'Normal human enthesis harbours conventional CD4+ and CD8+ T cells with regulatory features and inducible IL-17A and TNF expression'](#). *Annals of the Rheumatic Diseases*. 2020 Oct 6; Article in Press.
2. Ma, KS; Wang, LT; Tsai, SY. [Correspondence to: 'Combination of human umbilical cord mesenchymal \(stromal\) stem cell transplantation with IFN-gamma treatment synergistically improves the clinical outcomes of patients with rheumatoid arthritis'](#). *Annals of the Rheumatic Diseases*. 2020 Oct 7; Article in Press.

3. Wang, CY; Chen, CC; Lin, MH; Su, HT; Ho, MY; Yeh, JK; Tsai, ML; Hsieh, IC; Wen, MS. [TLR9 binding to beclin 1 and mitochondrial SIRT3 by a sodium-glucose co-transporter 2 inhibitor protects the heart from doxorubicin toxicity](#). *Biology*. 2020 Oct 29; 9(11): Article number 369.
4. Lee, CK; Hsieh, MC; Luo, CM; Liao, MT; Hsieh, MY; Wu, CC. [Use of the Viabahn covered stent for the treatment of venous rupture during interventions of dysfunctional or thrombosed hemodialysis vascular access](#). *Journal of Vascular Access*. 2020 Oct 3; Article in Press.
5. Yu, YR; Imrichova, H; Wang, HP; Chao, T; Xiao, ZT; Gao, M; Rincon-Restrepo, M; Franco, F; Genolet, R; Cheng, WC; Jandus, C; Coukos, G; Jiang, YF; Locasale, JW; Zippelius, A; Liu, PS; Tang, L; Bock, C; Vannini, N; Ho, PC. [Disturbed mitochondrial dynamics in CD8\(+\)TILs reinforce T cell exhaustion](#). *Nature Immunology*. 2020 Oct 5; Article in Press.
6. Jong, CB; Lu, TS; Liu, PYT; Hsieh, MY; Meng, SW; Huang, CC; Kao, HL; Wu, CC. [High dose escalation of intracoronary adenosine in the assessment of fractional flow reserve: A retrospective cohort study](#). *PLoS ONE*. 2020 Oct 15; 15: Article number 0240699.

#### **Institute of Molecular and Genomic Medicine**

1. Yang, HJ; Asakawa, H; Ohtsuki, C; Haraguchi, T; Hiraoka, Y. [Transient breakage of the nucleocytoplasmic barrier controls spore maturation via mobilizing the proteasome subunit Rpn11 in the fission yeast schizosaccharomyces pombe](#). *Journal of Fungi*. 2020 Oct 23; 6(4): Article number 242.
2. Hsu, CH; Jiang, YJ. [Does Nicastrin inadequacy cause melanocytotoxicity in human skin as in the fish counterpart?](#) *Journal of Investigative Dermatology*. 2020 Oct 12; Article in Press.

## Institute of Population Health Sciences

1. Lee, CTC; Huang, CM; Chang, LC; Wang, SW; Hsu, HP; Liao, JY; Guo, JL. [Prison sentencing increases the risk of unemployment among illegal heroin users in Taiwan.](#) *Substance Abuse: Treatment, Prevention, and Policy*. 2020 Oct 12; 15: Article number 77.
2. Yeh, SS; Chen, CJ; Wu, IC; Hsu, CC; Chen, TY; Tseng, WT; Tang, FC; Wang, CC; Juan, CC; Chiu, HC; Lo, HM; Yang, DH; Juang, JJ; Hsiung, CA. [Prognostic value and prevalence of complete right bundle branch block in an elderly population: A community-based 10-year prospective study.](#) *Aging*. 2020 Oct 6; 12(19):19073-19082.
3. Wu, WC; Chang, LY; Luh, DL; Wu, CC; Stanaway, F; Yen, LL; Chang, HY. [Sex differences in the trajectories of and factors related to extracurricular sport participation and exercise: A cohort study spanning 13 years.](#) *BMC Public Health*. 2020 Nov 2; 20: Article number 1639.
4. Chang, YK; Fan, HC; Lim, PS; Chuang, SY; Hsu, CC. [The relationship between resting heart rate and new-onset microalbuminuria in people with type 2 diabetes: An eight-year follow-up study.](#) *Diabetic Medicine*. 2020 Oct 23; Article in Press.
5. Wei, CF; Lin, CC; Tsai, MS; Guo, YL; Lin, SJ; Liao, HF; Hsieh, WS; Chen, MH; Chen, PC. [Associations between household icense burning and delayed motor development among preterm infants modified by gestational age and maternal educational status.](#) *Indoor Air*. 2020 Oct 8; Article in Press.
6. Lin, YH; Lin, KI; Pan, YC; Lin, SH. [Investigation of the role of anxiety and depression on the formation of phantom vibration and ringing syndrome caused by working stress during medical internship.](#) *International Journal of Environmental Research and Public Health*. 2020 Oct 14; 17(20): Article number 7480.
7. Chen, TY; Chen, MR; Liu, SW; Lin, JY; Yang, YT; Huang, HY; Chen, JK; Yang, CS; Lin, KM. [Assessment of polyethylene glycol-coated gold nanoparticle toxicity and inflammation in vivo using NF-kappaB reporter mice.](#) *International Journal of Molecular Sciences*. 2020 Oct 31; 21(21): Article number 8158.
8. Lin, TY; Huang, CM; Hsu, HP; Liao, JY; Cheng, VY; Wang, SW; Guo, JL. [Effects of a](#)

- [combination of three-dimensional virtual reality and hands-on horticultural therapy on institutionalized older adults' physical and mental health: Quasi-experimental design](#). *Journal of Medical Internet Research*. 2020 Nov 2; 22(11): Article number e19002.
9. Yen, FS; Wei, JC; Chiu, LT; Hsu, CC; Hou, MC; Hwu, CM. [Thiazolidinediones were associated with higher risk of cardiovascular events in patients with type 2 diabetes and liver cirrhosis](#). *Liver International*. 2020 Oct 30; Article in Press.
10. Chen, IC; Kuo, PH; Yang, AC; Tsai, SJ; Liu, TH; Liu, HJ; Lan, TH; Chen, HM; Huang, HN; Chung, RH; Liu, YL. [CUX2, BRAP and ALDH2 are associated with metabolic traits in people with excessive alcohol consumption](#). *Scientific Reports*. 2020 Oct 22; 10: Article number 18118.
11. Huang, J; Ning, Y; Cai, Y; Liang, KY; Chen, Y. [Composite likelihood inference under boundary conditions](#). *Statistica Sinica*. 2020 Apr; 30(2):1005-1025.
12. Huang, YC; Wu, FT; Huang, YC; Liu, CC; Chun Yi, L; Lin, HC; Chi, H; Huang, LM; Ho, YH; Lee, JT; Shih, SM; Ching Yi, H; Hsiung, CA; Taiwan Pediatric Infectious Disease Alliance. [Long-term effectiveness of pentavalent and monovalent rotavirus vaccines against hospitalization in Taiwan children](#). *Vaccine*. 2020 Sep; 38(41):6435-6441.

#### National Institute of Cancer Research

1. Yoo, C; Oh, DY; Choi, HJ; Kudo, M; Ueno, M; Kondo, S; Chen, LT; Osada, M; Helwig, C; Dussault, I; Ikeda, M. [Long-term follow-up of bintrafusp alfa, a bifunctional fusion protein targeting TGF-beta and PD-L1, in patients with pretreated biliary tract cancer](#). *Annals of Oncology*. 2020 Sep; 31(Suppl. 4):S268-S269.
2. Boku, N; Ryu, MH; Oh, DY; Oh, SC; Chung, HC; Lee, KW; Omori, T; Shitara, K; Sakuramoto, S; Chung, IJ; Yamaguchi, K; Kato, K; Sym, SJ; Kadowaki, S; Tsuji, K; Chen, JS; Bai, LY; Chen, LT; Kang, YK. [Nivolumab plus chemotherapy versus chemotherapy alone in patients with previously untreated advanced or recurrent gastric/gastroesophageal junction \(G/GEJ\) cancer: ATTRACTION-4 \(ONO-4538-37\) study](#). *Annals of Oncology*. 2020 Sep; 31(Suppl. 4):S1192.

3. Huang, WL; Luo, CW; Chou, CL; Yang, CC; Chen, TJ; Li, CF; Pan, MR. [High expression of UBE2B as a poor prognosis factor in patients with rectal cancer following chemoradiotherapy](#). *Anticancer Research*. 2020 Nov; 40(11):6305-6317.
4. Lee, TF; Liu, YP; Lin, YF; Hsu, CF; Lin, H; Chang, WC; Pan, CM; Chou, TY; Wu, CW. [TAZ negatively regulates the novel tumor suppressor ANKRD52 and promotes PAK1 dephosphorylation in lung adenocarcinomas](#). *Biochimica et Biophysica Acta (BBA) - Molecular Cell Research*. 2020 Oct 20; Article in Press.
5. Li, CJ; Lin, HY; Ko, CJ; Lai, JC; Chu, PY. [A novel biomarker driving poor-prognosis liver cancer: Overexpression of the mitochondrial calcium gatekeepers](#). *Biomedicines*. 2020 Oct 24; 8(11): Article number 451.
6. Chen, JY; Li, CF; Lai, YS; Hung, WC. [Lysine demethylase 2A expression in cancer-associated fibroblasts promotes breast tumour growth](#). *British Journal of Cancer*. 2020 Oct 7; Article in Press.
7. Chang, TM; Chu, PY; Hung, WC; Shan, YS; Lin, HY; Huang, KW; Chang, JS; Chen, LT; Tsai, HJ. [c-Myc promotes lymphatic metastasis of pancreatic neuroendocrine tumor through VEGFC upregulation](#). *Cancer Science*. 2020 Oct 31; Article in Press.
8. Lee, CH; Hung, PF; Liu, KJ; Chung, HL; Yang, WC; Hsu, KC; Fong, TH; Lo, HJ; Chen, YP; Yang, JR; Yen, CY. [LDOC1 suppresses microbe-induced production of IL-1Beta in human normal and cancerous oral cells through the PI3K/Akt/GSK-3Beta Axis](#). *Cancers*. 2020 Oct 27; 12(11): Article number 3148.
9. Huang, LY; Hsieh, YP; Wang, YY; Hwang, DY; Jiang, SS; Huang, WT; Chiang, WF; Liu, KJ; Huang, TT. [Single-cell analysis of different stages of oral cancer carcinogenesis in a mouse model](#). *International Journal of Molecular Sciences*. 2020 Oct 31; 21(21): Article number 8171.
10. Weng, YC; Juan, CK; Ho, HJ; Chang, YL; Wu, CY; Chen, YJ. [Atopic dermatitis does not increase the risk of inflammatory bowel disease: A nationwide cohort study](#). *Journal of Dermatology*. 2020 Oct 30; Article in Press.
11. Cai, Z; Li, CF; Han, F; Liu, C; Zhang, A; Hsu, CC; Peng, D; Zhang, X; Jin, G; Rezaeian, AH; Wang, G; Zhang, W; Pan, BS; Wang, CY; Wang, YH; Wu, SY; Yang, SC; Hsu, FC;

- D'Agostino, RB, Jr.; Furdui, CM; Kucera, GL; Parks, JS; Chilton, FH; Huang, CY; Tsai, FJ; Pasche, B; Watabe, K; Lin, HK. [Phosphorylation of PDHA by AMPK drives TCA cycle to promote cancer metastasis](#). *Molecular Cell*. 2020 Oct 15; 80(2):263-278.e267.
12. Li, YL; Chen, CH; Chen, JY; Lai, YS; Wang, SC; Jiang, SS; Hung, WC. [Single-cell analysis reveals immune modulation and metabolic switch in tumor-draining lymph nodes](#). *OncImmunology*. 2020 Oct 19; 9(1): Article number 1830513.
13. Changou, CA; Shiah, HS; Chen, LT; Liu, S; Luh, F; Liu, SH; Cheng, YC; Yen, Y. [A phase II clinical trial on the combination therapy of PHY906 plus capecitabine in hepatocellular carcinoma](#). *Oncologist*. 2020 Nov 3; Article in Press.
14. Chan, TC; Wu, WJ; Li, WM; Shiao, MS; Shiue, YL; Li, CF. [SLC14A1 prevents oncometabolite accumulation and recruits HDAC1 to transrepress oncometabolite genes in urothelial carcinoma](#). *Theranostics*. 2020 Sep 23; 10(25):11775-11793.

#### National Institute of Environmental Health Sciences

1. Wen, HJ; Guo, YL; Su, PH; Sun, CW; Wang, SLJ. [Prenatal and childhood exposure to phthalic acid esters and vaccination antibodies in children: A 15-year follow-up birth cohort study](#). *Environment International*. 2020 Dec; 145: Article number 106134.
2. Wei, CF; Lin, CC; Tsai, MS; Guo, YL; Lin, SJ; Liao, HF; Hsieh, WS; Chen, MH; Chen, PC. [Associations between household incense burning and delayed motor development among preterm infants modified by gestational age and maternal educational status](#). *Indoor Air*. 2020 Oct 8; Article in Press.
3. Luo, Y. H.; Cheng, H. J.; Tsai, F. Y.; Tsou, T. C.; Lin, S. Y.; Lin, P. [Primary amine modified gold nanodots regulate macrophage function and antioxidant response: Potential therapeutics targeting of Nrf2](#). *International Journal of Nanomedicine*. 2020 Oct 29; 15:8411-8426.
4. Lee, SC; Pan, CY; Lai, PC; Lee, TA; Wu, WT; Chang, SL; Tung, CJ. [Assessment of resident doses near nuclear power plants in Taiwan for epidemiology study](#). *Journal of Environmental Radioactivity*. 2020 Dec; 225: Article number 106443.
5. Chin, WS; Liao, SC; Pan, SC; Guo, YL. [Occupational and non-occupational injuries can](#)



[result in prolonged augmentation of psychiatric disorders](#). *Journal of Epidemiology*. 2020 Oct 10; Article in Press.

### National Institute of Infectious Diseases and Vaccinology

1. Sytwu, HK. [Expeditious responses to COVID-19 crisis: From governmental management to laboratory approach](#). *Biomedical Journal*. 2020 AUG; 43(4):311-313.
2. Lee, CH; Hung, PF; Liu, KJ; Chung, HL; Yang, WC; Hsu, KC; Fong, TH; Lo, HJ; Chen, YP; Yang, JR; Yen, CY. [LDOC1 suppresses microbe-induced production of IL-1Beta in human normal and cancerous oral cells through the PI3K/Akt/GSK-3Beta Axis](#). *Cancers*. 2020 Oct 27; 12(11): Article number 3148.
3. Huang, CH; Huang, CY; Ho, HM; Lee, CH; Lai, PT; Wu, SC; Liu, SJ; Huang, MH. [Nanoemulsion adjuvantation strategy of tumor-associated antigen therapy rephrases mucosal and immunotherapeutic signatures following intranasal vaccination](#). *Journal for ImmunoTherapy of Cancer*. 2020 Oct 9; 8(2): Article number e001022.
4. Wang, YC; Huang, SW; Chiang, MH; Lee, IM; Kuo, SC; Yang, YS; Chiu, CH; Su, YS; Chen, TL; Wang, FD; Lee, YT. [In vitro and in vivo activities of imipenem combined with BLI-489 against class D Beta-lactamase-producing Acinetobacter baumannii](#). *Journal of Antimicrobial Chemotherapy*. 2020 Oct 14; Article in Press.
5. Li, LH; Yang, YS; Sun, JR; Huang, TW; Huang, WC; Chen, FJ; Wang, YC; Kuo, TH; Kuo, SC; Chen, TL; Lee, YT; ACTION study group. [Clinical and molecular characterization of Acinetobacter seifertii in Taiwan](#). *Journal of Antimicrobial Chemotherapy*. 2020 Oct 31; Article in Press.
6. Sher, YP; Chai, KM; Chen, WC; Shen, KY; Chen, IH; Lee, MH; Chiu, FF; Liu, SJ. [A polypeptide of tumor-associated antigen L6 with intrinsic adjuvant activity enhances antitumor immunity](#). *Vaccines*. 2020 Oct 21; 8(4): Article number 620.
7. Chen, PL; Tzeng, TT; Hu, AYC; Wang, LHC; Lee, MS. [Development and evaluation of vero cell-derived master donor viruses for influenza pandemic preparedness](#). *Vaccines*. 2020 Oct 25; 8(4): Article number 626.



### Center for Neuropsychiatric Research

1. Wu, JJ; Weng, SC; Liang, CK; Lin, CS; Lan, TH; Lin, SY; Lin, YT. [Effects of kidney function, serum albumin and hemoglobin on dementia severity in the oldest old people with newly diagnosed Alzheimer's disease in a residential aged care facility: A cross-sectional study.](#) *BMC Geriatrics*. 2020 Oct 7; 20: Article number 391.
2. Wu, TL; Ting, TT; Chen, CY; Su, LW; Chen, WJ. [Early sexual initiation and risky sexual practices among alcohol- and tobacco-using young adults in Taiwan: Mediation analysis of preceding-sex use of illicit drugs.](#) *BMC Public Health*. 2020 Nov 3; 20: Article number 1647.
3. Lin, E; Kuo, PH; Liu, YL; Yu, YWY; Yang, AC; Tsai, SJ. [Prediction of antidepressant treatment response and remission using an ensemble machine learning framework.](#) *Pharmaceuticals*. 2020 Oct 13; 13(10): Article number 305.
4. Chen, IC; Kuo, PH; Yang, AC; Tsai, SJ; Liu, TH; Liu, HJ; Lan, TH; Chen, HM; Huang, HN; Chung, RH; Liu, YL. [CUX2, BRAP and ALDH2 are associated with metabolic traits in people with excessive alcohol consumption.](#) *Scientific Reports*. 2020 Oct 22; 10: Article number 18118.
5. Hsieh, CP; Chen, H; Chan, MH; Chen, L; Chen, HH. [N,N-dimethylglycine prevents toluene-induced impairment in recognition memory and synaptic plasticity in mice.](#) *Toxicology*. 2020 Oct 18; 446: Article number 152613.

### Immunology Research Center

1. Lai, CH; Chang, CC; Chuang, HC; Tan, TH; Lyu, PC. [Structural insights into the active site formation of dusp22 in n-loop-containing protein tyrosine phosphatases.](#) *International Journal of Molecular Sciences*. 2020 Oct 12; 21(20): Article number 7515.

### Graduate Student Program

1. Kuo, CJ; Lee, KH; Huang, CC; Wang, IF; Hsieh, CCJ; Lin, HC; Lee, YC. [Puralpha regulates the induction of Znf179 transcription during neuronal differentiation.](#) *Biochemical and Biophysical Research Communications*. 2020 Oct 24; Article in Press.