

## NHRI Publication \_JULY 2020

### Institute of Biomedical Engineering and Nanomedicine

1. Liao, WH; Hsiao, MY; Kung, Y; Liu, HL; Béra, JC; Inserra, C; Chen, WS. [TRPV4 promotes acoustic wave-mediated BBB opening via Ca<sup>2+</sup>/PKC-delta pathway](#). *Journal of Advanced Research*. 2020 Jun 21; Article in Press.
2. Ivancic, F; Sheu, TWH; Solovchuk, M. [Bacterial chemotaxis in thin fluid layers with free surface](#). *Physics of Fluids*. 2020 Jun; 32(6): Article number 061902.
3. Chang, YC; Su, CY; Chang, CH; Fang, HW; Wei, Y. [Correlation between tribological properties and the quantified structural changes of lysozyme on poly \(2-hydroxyethyl methacrylate\) contact lens](#). *Polymers*. 2020 Jul 23; 12(8): Article number 1639.
4. Thacker, M; Tseng, CL; Chang, CY; Jakfar, S; Chen, HY; Lin, FH. [Mucoadhesive \*Bletilla striata\* polysaccharide-based artificial tears to relieve symptoms and inflammation in rabbit with dry eyes syndrome](#). *Polymers*. 2020 Jun 20; 12(7): Article number 1465.
5. Liao, LD; Wang, Y; Tsao, YC; Wang, IJ; Jhang, DF; Chuang, CC; Chen, SF. [Design and implementation of a multifunction wearable device to monitor sleep physiological signals](#). *Micromachines*. 2020 Jul 10; 11(7): Article number 672.
6. Liu, MH; Chen, TC; Vicente, JR; Yao, CN; Yang, YC; Chen, CP; Lin, PW; Ho, YC; Chen, J; Lin, SY; Chan, YH; Chan, YH; Chan, YH. [Cyanine-based polymer dots with long-wavelength excitation and near-infrared fluorescence beyond 900 nm for in vivo biological imaging](#). *ACS Applied Bio Materials*. 2020 Jun 15; 3(6): 3846-3858.
7. Hsiao, TC; Chang, JS; Wang, JY; Wu, DA; Chuang, KJ; Chen, JK; Cheng, TJ; Chuang, HC. [Serum neurofilament light polypeptide is a biomarker for inflammation in cerebrospinal fluid caused by fine particulate matter](#). *Aerosol and Air Quality Research*. 2020 Jul; 20(7): 1665-1669.

## Institute of Biotechnology and Pharmaceutical Research

1. Huang, CS; Yu, AL; Tseng, LM; Chow, LWC; Hou, MF; Hurvitz, SA; Schwab, RB; J, LM; Chang, HK; Chang, HT; Chen, SC; Kim, SB; Hung, JT; Ueng, SH; Lee, SH; Chen, CC; Rugo, HS. [Globo H-KLH vaccine adagloxad simolenin \(OBI-822\)/OBI-821 in patients with metastatic breast cancer: phase II randomized, placebo-controlled study.](#) *Journal for Immunotherapy of Cancer.* 2020 Jul 22; 8(2): Article number e000342.
2. Hung, HC; Ke, YY; Huang, SY; Huang, PN; Kung, YA; Chang, TY; Yen, KJ; Peng, TT; Chang, SE; Huang, CT; Tsai, YR; Wu, SH; Lee, SJ; Lin, JH; Liu, BS; Sung, WC; Shih, SR; Chen, CT; Hsu, JT. [Discovery of M protease inhibitors encoded by SARS-CoV-2.](#) *Antimicrobial Agents and Chemotherapy.* 2020 Jul 15; Article in Press.
3. Liao, MF; Hsu, JL; Lu, KT; Chao, PK; Cheng, MY; Hsu, HC; Lo, AL; Lee, YL; Hung, YH; Lyu, RK; Kuo, HC; Chu, CC; Ro, LS. [Granulocyte Colony Stimulating Factor \(GCSF\) can attenuate neuropathic pain by suppressing monocyte Chemoattractant Protein-1 \(MCP-1\) expression, through upregulating the early MicroRNA-122 expression in the dorsal root ganglia.](#) *Cells.* 2020 Jul 11; 9(7): Article number 1669.
4. Syed, SB; Lin, SY; Arya, H; Fu, IH; Yeh, TK; Charles, MRC; Periyasamy, L; Hsieh, HP; Coumar, MS. [Overcoming vincristine resistance in cancer: Computational design and discovery of piperine-inspired P-glycoprotein inhibitors.](#) *Chemical Biology and Drug Design.* 2020 Jul 7; Article in Press.

## Institute of Cellular and Systems Medicine

1. [Wu, KK; Kuo, CC; Yet, SF; Lee, CM; Liou, JY. 5-methoxytryptophan: An arsenal against vascular injury and inflammation.](#) *Journal of Biomedical Science.* 2020 Jul; 27: Article number 79.
2. Hsiao, PJ; Chiu, CC; Lin, KH; Hu, FK; Tsai, PJ; Wu, CT; Pang, YK; Lin, Y; Kuo, MH; Chen, KH; Wu, YS; Wu, HY; Chang, YT; Chang, YT; Cheng, CS; Chuu, CP; Lin, FH; Chang, CW; Li, YK; Chan, JS; Chu, CM. [Usability of wearable devices with a novel cardiac force index for estimating the dynamic cardiac function: Observational study.](#) *JMIR Mhealth Uhealth.* 2020 Jul 21; 8(7): Article number e15331.

3. Glanz, VY; Kashirskikh, DA; Grechko, AV; Yet, SF; Sobenin, IA; Orekhov, AN. [Sialidase activity in human blood serum has a distinct seasonal pattern: A pilot study.](#) *Biology*. 2020 Jul 22; 9(8): Article number 184.
4. Yen, BL; Hwa, HL; Hsu, PJ; Chen, PM; Wang, LT; Jiang, SS; Liu, KJ; Sytwu, HK; Yen, ML. [Hla-g expression in human mesenchymal stem cells \(Mscs\) is related to unique methylation pattern in the proximal promoter as well as gene body dna.](#) *International Journal of Molecular Sciences*. 2020 Jul 18; 21(14): Article number 5075.

### Institute of Molecular and Genomic Medicine

1. Pan, YR; Wu, CE; Wang, YC; Yeh, YC; Lu, ML; Hung, YP; Chao, Y; Yeh, DW; Lin, CH; Hsieh, JCH; Chen, MH; Yeh, CN. [Establishment of a novel gene panel as a biomarker of immune checkpoint inhibitor response.](#) *Clinical and Translational Immunology*. 2020 Jun 30; 9(7): Article number e1145.
2. Huang, YS; Lu, KC; Chao, HW; Chen, A; Chao, TK; Guo, CY; Hsieh, HY; Shih, HM; Sytwu, HK; Wu, CC. [The MTNR1A mRNA is stabilized by the cytoplasmic hnRNPL in renal tubular cells.](#) *Journal of Cellular Physiology*. 2020 Jul 30; Article in Press.

### Institute of Population Health Sciences

1. Yao, TC; Huang, YW; Chang, SM; Tsai, SY; Wu, AC; Tsai, HJ. [Association between oral corticosteroid bursts and severe adverse events: A nationwide population-based cohort study.](#) *Annals of Internal Medicine*. 2020 Jul 7; Article in Press.
2. Wang, JY; Pawankar, R; Tsai, HJ; Wu, LSH; Kuo, WS. [COVID-19 and asthma, the good or the bad?](#) *Allergy*. 2020 Jul; Article in Press.
3. Chen, CC; Cheng, KW; Chang, HY; Chang, SS. [Changes in alcoholic beverage preference and consumption in Taiwan following accession to the World Trade Organization.](#) *Addiction*. 2020 Jul 3; Article in Press.
4. Chuang, SY; Wang, PN; Chen, LK; Chou, KH; Chung, CP; Chen, CH; Mitchell, GF; Pan, WH; Cheng, HM. [Associations of blood pressure and carotid flow velocity with brain volume and cerebral small vessel disease in a community-based population.](#) *Translational*

- Stroke Research*. 2020 Aug 1; Article in Press.
5. Cheng, VY; Huang, CM; Liao, JY; Hsu, HP; Wang, SW; Huang, SF; Guo, JL. [Combination of 3-Dimensional virtual reality and hands-on aromatherapy in improving institutionalized older adults' psychological health: Quasi-experimental study](#). *Journal of Medical Internet Research*. 2020 Jul 23; 22(7): Article number 17096.
  6. Huang, WY; Lee, M; Sung, SF; Tang, SC; Chang, KH; Huang, YS; Lee, JD; Lee, TH; Jeng, JS; Chung, CM; Wu, YL; Hsieh, TT; Ovbiagele, B. [Atrial fibrillation trial to evaluate real-world procedures for their utility in helping to lower stroke events: A randomized clinical trial](#). *International Journal of Stroke*. 2020 Jul 8; Article in Press.
  7. Tsao, PC; Yeh, HL; Shiau, YS; Chang, YC; Chiang, SH; Soong, WJ; Jeng, MJ; Hsiao, KJ; Chiang, PH. [Long-term neurodevelopmental outcomes of significant neonatal jaundice in Taiwan from 2000-2003: A nationwide, population-based cohort study](#). *Scientific Reports*. 2020 Jul 9; 10: Article number 11374.
  8. Chang, YC; Chao, SH; Chen, CC; Ser, KH; Chong, K; Lu, CH; Hsieh, ML; Huang, YY; Lee, YC; Hsu, CC; Chuang, LM; Lee, WJ. [The effects of bariatric surgery on renal, neurological, and ophthalmic complications in patients with type 2 diabetes: The Taiwan diabetes study](#). *Obesity Surgery*. 2020 Jul 18; Article in Press.
  9. Yang, TO; Huang, KYA; Chen, MH; Chen, PC; Huang, WT. [Time-dependent associations between presentation-based infections and subsequent risk of childhood immune cell malignancies](#). *Cancer Epidemiology*. 2020 Aug; 67: Article number 101767.
  10. Watanabe, S; Wahlqvist, ML. [Covid-19 and dietary socioecology: Risk minimisation](#). *Asia Pacific Journal of Clinical Nutrition*. 2020 Jul 17; 29(2): 207-219.

#### **National Institute of Cancer Research**

1. Shen, CJ; Chang, KY; Lin, BW; Lin, WT; Su, CM; Tsai, JP; Liao, YH; Hung, LY; Chang, WC; Chen, BK. [Oleic acid -induced NOX4 is dependent on ANGPTL4 expression to promote human colorectal cancer metastasis](#). *Theranostics*. 2020 May 30; 10(16): 7083-7099.
2. Gopinathan, P; Chiang, NJ; Wang, CH; Sinha, A; Tsai, YC; Tu, HC; Hung, SC; Hsu, PH;

- Shan, YS; Lee, GB. [Aptamer probed isolation of circulating tumor cells in cholangiocarcinoma patients](#). *Sensors and Actuators B: Chemical*. 2020 Nov 1; 322: Article number 128569.
3. Chu, PY; Tung, SL; Tsai, KW; Shen, FP; Chan, SH. [Identification of the novel oncogenic role of SAAL1 and its therapeutic potential in hepatocellular carcinoma](#). *Cancers*. 2020 Jul 8; 12(7): Article number 1843.
  4. Chen, YJ; Juan, CK; Chang, YT; Wu, CY; Ho, HJ; Tseng, HC. [Association between inflammatory bowel disease and bullous pemphigoid: A population-based case-control study](#). *Scientific Reports*. 2020 Jul 29; 10: Article number 12727.
  5. Lin, PC; Yeh, YM; Wu, PY; Hsu, KF; Chang, JY; Shen, MR. [Germline susceptibility variants impact clinical outcome and therapeutic strategies for stage III colorectal cancer](#)[Erratum: *Scientific Reports*. 2019 Mar; 9: Article number 3931.]. *Scientific Reports*. 2020 Jul 17; 10: Article number 12216.
  6. Yang, YH; Warnakulasuriya, S; Yang, HF; Lin, LJ; Wang, YW. [Public health measures to reduce areca nut and betel quid use for control of oral cancer in Taiwan](#). *Oral Oncology*. 2020 Jul 22; Article in Press.

#### **National Institute of Environmental Health Sciences**

1. Xu, D; Huang, SK. [IL-33: A key player in the development of iron-recycling red pulp macrophages](#). *Cellular and Molecular Immunology*. 2020 Jul 31; Article in Press.
2. Lin, MY; Chen, YC; Lin, DY; Hwang, BF; Hsu, HT; Cheng, YH; Liu, YT; Tsai, PJ. [Effect of implementing electronic toll collection in reducing highway particulate matter pollution](#). *Environmental Science and Technology*. 2020 Jun 26; 54(15): 9210-9216.
3. Waits, A; Chen, HC; Kuo, PL; Wang, CW; Huang, HB; Chang, WH; Shih, SF; Huang, PC. [Urinary phthalate metabolites are associated with biomarkers of DNA damage and lipid peroxidation in pregnant women -Tainan Birth Cohort Study \(TBCS\)](#). *Environmental Research*. 2020 Sep; 188: Article number 109863.
4. Lin, CY; Lee, HL; Hwang, YT; Huang, PC; Wang, C; Sung, FC; Wu, C; Su, TC. [Urinary heavy metals, DNA methylation, and subclinical atherosclerosis](#). *Ecotoxicology and*

- Environmental Safety*. 2020 Nov; 204: Article number 111039.
5. Hsu, SC; Chang, JH; Lee, CL; Huang, WC; Hsu, YP; Liu, CT; Jean, SS; Huang, SK; Hsu, CW. [Differential time-lag effects of ambient PM\(2.5\) and PM\(2.5\)-bound PAHs on asthma emergency department visits](#). *Environmental Science and Pollution Research International*. 2020 Jul 29; Article in Press.
  6. Wang, CC; Lin, PP; Chou, CY; Wang, SS; Tung, CW. [Prediction of human fetal-maternal blood concentration ratio of chemicals](#). *PeerJ*. 2020 Jul; 8: Article number e9562.

### National Institute of Infectious Diseases and Vaccinology

1. Yang, SJ; Chen, YY; Hsu, CH; Hsu, CW; Chang, CY; Chang, JR; Dou, HY. [Activation of M1 macrophages in response to recombinant TB vaccines with enhanced Antimycobacterial Activity](#). *Frontiers in Immunology*. 2020 Jun: Article number 01298.
2. Hung, HC; Ke, YY; Huang, SY; Huang, PN; Kung, YA; Chang, TY; Yen, KJ; Peng, TT; Chang, SE; Huang, CT; Tsai, YR; Wu, SH; Lee, SJ; Lin, JH; Liu, BS; Sung, WC; Shih, SR; Chen, CT; Hsu, JT. [Discovery of M protease inhibitors encoded by SARS-CoV-2](#). *Antimicrobial Agents and Chemotherapy*. 2020 Jul 15; Article in Press.
3. Tsai, HY; Wu, SC; Li, JC; Chen, YM; Chan, CC; Chen, CH. [Loss of the drosophila branched-chain alpha-keto acid dehydrogenase complex \(BCKDH\) results in neuronal dysfunction](#). *Disease Models and Mechanisms*. 2020 Jul 17; Article in Press.
4. Chiang, CH; Lai, YL; Huang, YN; Yu, CC; Lu, CC; Yu, GY; Yu, MJ. [Sequential phosphorylation of the HCV NS5A protein depends on NS3-mediated auto-cleavage between NS3 and NS4A](#). *Journal of Virology*. 2020 Jul 22; Article in Press.
5. Tsai, HP; Yeh, CS; Lin, IT; Ko, WC; Wang, JR. [Increasing cytomegalovirus detection rate from respiratory tract specimens by a new laboratory-developed automated molecular diagnostic test](#). *Microorganisms*. 2020 Jul 12; 8(7): Article number 1063.
6. Teng, CF; Li, TC; Huang, HY; Lin, JH; Chen, WS; Shyu, WC; Wu, HC; Peng, CY; Su, IJ; Jeng, LB. [Next-Generation sequencing-based quantitative detection of hepatitis B virus Pre-S mutants in plasma predicts hepatocellular carcinoma recurrence](#). *Viruses*. 2020 Jul 24; 12(8): Article number 796.

7. Yang, CY; Tsao, CH; Hsieh, CC; Lin, CK; Lin, CS; Li, YH; Chang, WC; Cheng, JC; Lin, GJ; Sytwu, HK; Wang, YL; Chen, YW. [Downregulation of Jumonji-C domain-containing protein 5 inhibits proliferation by silibinin in the oral cancer PDTX model.](#) *PLoS ONE*. 2020 Jul 17; 15(7): Article number e0236101.

#### **National Mosquito-Borne Diseases Control Research Center**

1. Tsai, HY; Wu, SC; Li, JC; Chen, YM; Chan, CC; Chen, CH. [Loss of the drosophila branched-chain alpha-keto acid dehydrogenase complex \(BCKDH\) results in neuronal dysfunction.](#) *Disease Models and Mechanisms*. 2020 Jul 17; Article in Press.

#### **Center for Neuropsychiatric Research**

1. Lin, YF. [Methodology in the GBD study of China.](#) *Lancet*. 2020 Jul; 396(10243): 25-26.
2. Liao, MF; Hsu, JL; Lu, KT; Chao, PK; Cheng, MY; Hsu, HC; Lo, AL; Lee, YL; Hung, YH; Lyu, RK; Kuo, HC; Chu, CC; Ro, LS. [Granulocyte Colony Stimulating Factor \(GCSF\) can attenuate neuropathic pain by suppressing monocyte Chemoattractant Protein-1 \(MCP-1\) expression, through upregulating the early MicroRNA-122 expression in the dorsal root ganglia.](#) *Cells*. 2020 Jul 11; 9(7): Article number 1669.
3. Lung, Y; Chang, SS; Hsu, CY; Wu, SC; Chen, CY; Chen, WJ. [Residential socioeconomic environments and areca Nut use in Taiwan: A comparison with alcohol and tobacco use in multilevel analysis.](#) *Substance Use and Misuse*. 2020 Jul 10; Article in Press.

#### **Construction, Management & Service Center**

1. Cheng, TC; Lee, YH; Chang, YP; Lee, DC. [Improved urinary melatonin level as the perspective indicator that leads to better sleeping quality in bladder cancer patients.](#) *Therapeutic Advances in Urology*. 2020 Jul 20; Article in Press.

#### **Graduate Student Program**

1. Chang, YP; Lee, MS; Wu, DW; Tsai, JH; Ho, PS; Lin, CR; Chuang, HY. [Risk factors for depression in patients with Parkinson's disease: A nationwide nested case-control study.](#)

- PLoS ONE*. 2020 Jul 27; 15(7): Article number e0236443.
2. Tzeng, LY; Huang, LK; Lee, YT. [Letter to the editor regarding "Acupuncture-Induced Cranial Epidural Abscess: Case Report and Review of the Literature"](#). *World Neurosurgery*. 2020 Jul; 139: 699.a