

## NHRI Publication \_ Jan 2020

### Institute of Biomedical Engineering and Nanomedicine

1. Farrher, E; Grinberg, F; Kuo, LW; Cho, KH; Buschbeck, RP; Chen, MJ; Chiang, HH; Choi, CH; Shah, NJ. [Dedicated diffusion phantoms for the investigation of free water elimination and mapping: Insights into the influence of T-2 relaxation properties.](#) *NMR in Biomedicine*. 2020 Jan 11; Article in Press.
2. Su, CY; Yeh, LK; Lai, CC; Dubuisson, M; Tsao, YF; Tseng, CL; Fang, AH. [The biotribological effect of poly-Gamma-glutamic acid in the lysozyme-ionic contact lens system.](#) *Polymers*. 2020 Jan 7; 12(1): Article number 156.
3. Li, KY; Tsai, CC; Lin, TC; Wang, YL; Lin, FH; Lin, CP. [Fluorinated montmorillonite and 3YSZ as the inorganic fillers in fluoride-releasing and rechargeable dental composition resin.](#) *Polymers*. 2020 Jan 16; 12(1): Article number 223.

### Institute of Biotechnology and Pharmaceutical Research

1. Shia, KS; Huang, JK. [Development of cross-conjugated vinylogous \[4+2\] anionic annulation. application to the total synthesis of natural antibiotic \(+/-\)-ABX.](#) *Angewandte Chemie*. 2020 Jan 16; Article in Press.
2. Lin, WH; Wu, SY; Yeh, TK; Chen, CT; Song, JS; Shiao, HY; Kuo, CC; Hsu, T; Lu, CT; Wang, PC; Wu, TS; Peng, YH; Lin, HY; Chen, CP; Weng, YL; Kung, FC; Wu, MH; Su, YC; Huang, KW; Chou, LH; Hsueh, CC; Yen, KJ; Kuo, PC; Huang, CL; Chen, LT; Shih, C; Tsai, HJ; Jiaang, WT. [Identification of a multitargeted tyrosine kinase inhibitor for the treatment of gastrointestinal stromal tumors and acute myeloid leukemia.](#) *Journal of Medicinal Chemistry*. 2019 Dec; 62(24): 11135-11150.
3. Rammohan, A; Reddy, JS; Sravya, G; Rao, CN; Zyryanov, GV. [Chalcone synthesis, properties and medicinal applications: A review.](#) *Environmental Chemistry Letters*. 2020 Jan 6; Article in Press.
4. Yeo, WL; Heng, E; Tan, LL; Lim, YW; Ching, KC; Tsai, DJ; Jhang, YW; Lauderdale, TL;

Shia, KS; Zhao, H; Ang, EL; Zhang, MM; Lim, YH; Wong, FT. [Biosynthetic engineering of the antifungal, anti-MRSA auroramycin](#). *Microbial Cell Factories*. 2020 Jan 6; 19: Article number 3.

#### **Institute of Cellular and Systems Medicine**

1. Chen, SY; Lin, MC; Tsai, JS; He, PL; Luo, WT; Chiu, IM; Herschman, HR; Li, HJ. [Exosomal 2',3'-CNP from mesenchymal stem cells promotes hippocampus CA1 neurogenesis/neuritogenesis and contributes to rescue of cognition/learning deficiencies of damaged brain](#). *Stem Cells Translational Medicine*. 2020 Jan 15; Article in Press.
2. Lu, HE; Tsai, CL; Chiu, IM; Pan, YL; Lin, YF; Lin, HC; Hsu, YC. [Generation of induced pluripotent stem cells MMCi001-A from a Taiwanese hearing loss patient carrying GJB2 pV37I mutation](#). *Stem Cell Research*. 2019 Dec 18; 42: Article number 101692.
3. Liu, Y; Hsu, SH. [Biomaterials and neural regeneration](#). *Neural Regeneration Research*. 2020 Jul; 15(7): 1243-1244.
4. Hsiao, PJ; Liao, CY; Kao, YH; Chan, JS; Lin, YF; Chuu, CP; Chen, JS. [Comparison of fractional excretion of electrolytes in patients at different stages of chronic kidney disease: A cross-sectional study](#). *Medicine*. 2020 Jan; 99(2): Article number e18709.

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

1. Lai, CY; Yeh, DW; Lu, CH; Liu, YL; Chuang, YC; Ruan, JW; Kao, CY; Huang, LR; Chuang, TH. [Epigenetic silencing of ubiquitin specific protease 4 by snail1 contributes to macrophage-dependent inflammation and therapeutic resistance in lung cancer](#). *Cancers*. 2020 Jan 8; 12(1): Article number 148.
2. Lu, CY; Yen, TY; Chang, LY; Liao, YJ; Liu, HH; Huang, LM. [Multiple-locus variable-number tandem-repeat analysis \(MLVA\) of macrolide-susceptible and -resistant \*Mycoplasma pneumoniae\* in children in Taiwan](#). *Journal of the Formosan Medical Association = Taiwan yi zhi*. 2020 Jan 7; Article in Press.

## Institute of Population Health Sciences

1. Nelson, RG; Grams, ME; Ballew, SH; Sang, YY; Azizi, F; Chadban, SJ; Chaker, L; Dunning, SC; Fox, C; Hirakawa, Y; Iseki, K; Ix, J; Jafar, TH; Kottgen, A; ..; et al. [Development of risk prediction equations for incident chronic kidney disease](#). *JAMA- Journal of the American Medical Association*. 2019 Dec; 322(21): 2104-2114.
2. Chang, AY; Liao, BY. [Reduced translational efficiency of eukaryotic genes after duplication events](#). *Molecular Biology and Evolution*. 2020 Jan 6; Article in Press.
3. Kuo, CL; Chou, HY; Chiu, YC; Cheng, AN; Fan, CC; Chang, YN; Chen, CH; Jiang, SS; Chen, NJ; Yueh-Luen Lee, A. [Mitochondrial oxidative stress by Lon-PYCR1 maintains an immunosuppressive tumor microenvironment that promotes cancer progression and metastasis](#). *Cancer Letters*. 2020 Jan 24; 474: 138-150.
4. Tsai, IJ; Lai, TS; Shiao, CC; Huang, TM; Wang, CH; Chen, LW; Lin, YH; Chen, L; Wu, VC; Chu, TS. [Proton-pump inhibitors augment the risk of major adverse cardiovascular events and end-stage renal disease in patients with acute kidney injury after temporary dialysis](#). *Clinical Pharmacology and Therapeutics*. 2020 Jan 4; Article in Press.
5. Yen, FS; Yang, YC; Hwu, CM; Wei, JC; Huang, YH; Hou, MC; Hsu, CC. [Liver-related long-term outcomes of thiazolidinedione use in persons with type 2 diabetes](#). *Liver International*. 2020 Jan 21; Article in Press.
6. Chiang, CY; Ching, YH; Chang, TY; Hu, LS; Yong, YS; Keak, PY; Mustika, I; Lin, MD; Liao, BY. [Novel eye genes systematically discovered through an integrated analysis of mouse transcriptomes and phenome](#). *Computational and Structural Biotechnology Journal*. 2020 Dec 27; 18: 73-82.
7. Lin, YT; Wu, PH; Liang, SS; Mubanga, M; Yang, YH; Hsu, YL; Kuo, MC; Hwang, SJ; Kuo, PL. [Protein-bound uremic toxins are associated with cognitive function among patients undergoing maintenance hemodialysis](#). *Scientific Reports*. 2019 Dec 31; 9: Article number 20388.
8. Fang, CP; Wang, SC; Tsou, HH; Chung, RH; Hsu, YT; Liu, SC; Kuo, HW; Liu, TH; Chen, ACH; Liu, YL. [Genetic polymorphisms in the opioid receptor delta 1 \(OPRD1\) gene are associated with methadone dose in methadone maintenance treatment for heroin](#)

- [dependence](#). *Journal of Human Genetics*. 2020 Jan 7; Article in Press.
9. Zhang, HW; Kok, VC; Chuang, SC; Tseng, CH; Lin, CT; Li, TC; Sung, FC; Wen, CP; Hsiung, CA; Hsu, CY. [Long-term exposure to ambient hydrocarbons increases dementia risk in people aged 50 years and above in Taiwan](#). *Current Alzheimer Research*. 2019 Jan 2; 16(14): 1276-1289.
  10. Zhong, LZ; Ali, H; Fang, ZX; Wahlqvist, ML; Hodgson, JM; Johnson, SK. [Lupin seed coat as a promising food ingredient: Physicochemical, nutritional, antioxidant properties, and effect of genotype and environment](#). *International Journal of Food Science and Technology*. 2019 Nov; Article in Press.
  11. Gao, W; Wen, CP; Tsai, MK. [Pre-screening mechanism for LDCT lung cancer screening: Identifying higher-risk individuals among never smokers](#). *Tobacco Induced Diseases*. 2019 Oct 16; 17: 17.
  12. Gao, W; Wen, CP; Tsai, MK; Sanna, M. [Mystery of rapid increase of lung cancer in nonsmoking women](#). *Tobacco Induced Diseases*. 2019 Oct 12; 17: 31-32.

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

1. Wu, WR; Lin, JT; Pan, CT; Chan, TC; Liu, CL; Wu, WJ; Sheu, JJ; Yeh, BW; Huang, SK; Jhung, JY; Hsiao, MS; Li, CF; Shiue, YL. [Amplification-driven BCL6-suppressed cytostasis is mediated by transrepression of FOXO3 and post-translational modifications of FOXO3 in urinary bladder urothelial carcinoma](#). *Theranostics*. 2020 Jan 1; 10(2): 707-724.
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3. Kuo, CL; Chou, HY; Chiu, YC; Cheng, AN; Fan, CC; Chang, YN; Chen, CH; Jiang, SS; Chen, NJ; Yueh-Luen Lee, A. [Mitochondrial oxidative stress by Lon-PYCR1 maintains an immunosuppressive tumor microenvironment that promotes cancer progression and metastasis](#). *Cancer Letters*. 2020 Jan 24; 474: 138-150.

4. Hsiao, KC; Chu, PY; Chang, GC; Liu, KJ. [Elevated expression of lumican in lung cancer cells promotes bone metastasis through an autocrine regulatory mechanism](#). *Cancers*. 2020 Jan 17; 12(1): Article number 233.
5. Huang, CY; Hsu, LH; Chen, CY; Chang, GC; Chang, HW; Hung, YM; Liu, KJ; Kao, SH. [Inhibition of alternative cancer cell metabolism of EGFR mutated non-small cell lung cancer serves as a potential therapeutic strategy](#). *Cancers*. 2020 Jan 10; 12(1): Article number 181.
6. Lin, WH; Wu, SY; Yeh, TK; Chen, CT; Song, JS; Shiao, HY; Kuo, CC; Hsu, T; Lu, CT; Wang, PC; Wu, TS; Peng, YH; Lin, HY; Chen, CP; Weng, YL; Kung, FC; Wu, MH; Su, YC; Huang, KW; Chou, LH; Hsueh, CC; Yen, KJ; Kuo, PC; Huang, CL; Chen, LT; Shih, C; Tsai, HJ; Jiaang, WT. [Identification of a multitargeted tyrosine kinase inhibitor for the treatment of gastrointestinal stromal tumors and acute myeloid leukemia](#). *Journal of Medicinal Chemistry*. 2019 Dec; 62(24): 11135-11150.
7. Chua, KV; Fan, CS; Chen, CC; Chen, LL; Hsieh, SC; Huang, TS. [Octyl gallate induces pancreatic ductal adenocarcinoma cell apoptosis and suppresses endothelial-mesenchymal transition-promoted M2-Macrophages, HSP90alpha secretion, and tumor growth](#). *Cells*. 2020 Jan; 9(1): Article number 91.
8. Lin, CM; Lin, LW; Chen, YW; Ye, YL. [The expression and prognostic impact of proinflammatory cytokines and their associations with carcinogens in oropharyngeal squamous cell carcinoma](#). *Cancer Immunology, Immunotherapy*. 2020 Jan 22; Article in Press.

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

1. Wang, LT; Liu, KY; Jeng, WY; Chiang, CM; Chai, CY; Chiou, SS; Huang, MS; Yokoyama, KK; Wang, SN; Huang, SK; Hsu, SH. [PCAF-mediated acetylation of ISX recruits BRD4 to promote epithelial-mesenchymal transition](#). *EMBO Reports*. 2020 Jan 7: Article number e48795.
2. Tung, CW; Cheng, HJ; Wang, CC; Wang, SS; Lin, PP. [Leveraging complementary computational models for prioritizing chemicals of developmental and reproductive](#)

- [toxicity concern: An example of food contact materials.](#) *Archives of Toxicology*. 2020 Jan 2; Article in Press.
3. Chen, TH; Hsu, YC; Zeng, YT; Candice Lung, SC; Su, HJ; Chao, HJ; Wu, CD. [A hybrid kriging/land-use regression model with Asian culture-specific sources to assess NO2 spatial-temporal variations.](#) *Environmental Pollution*. 2020 Apr; 259: Article number 113875.
  4. Yen, CC; Tung, CW; Chang, CW; Tsai, CC; Hsu, MC; Wu, YT. [Potential risk of higenamine misuse in sports: Evaluation of lotus plumule extract products and a human study.](#) *Nutrients*. 2020 Jan 21; 12(2): Article number 285.
  5. Tseng, CH. [Metformin use is associated with a lower risk of uterine leiomyoma in female type 2 diabetes patients.](#) *Therapeutic Advances in Endocrinology and Metabolism*. 2019 Dec; 10: 1-13.
  6. Yang, CF; Karmaus, WJJ; Yang, CC; Chen, ML; Wang, IJ. [Bisphenol a exposure, DNA methylation, and asthma in Children.](#) *International Journal of Environmental Research and Public Health*. 2020 Jan 1; 17(1): Article number 298.

#### **National Institute of Infectious Diseases and Vaccinology**

1. Sun, P; Nie, K; Zhu, Y; Liu, Y; Wu, P; Liu, Z; Du, S; Fan, H; Chen, CH; Zhang, R; Wang, P; Cheng, G. [A mosquito salivary protein promotes flavivirus transmission by activation of autophagy.](#) *Nature Communications*. 2020 Jan 14; 11: Article number 260.
2. Liu, W; Duan, X; Xu, L; Shang, W; Zhao, J; Wang, L; Li, JC; Chen, CH; Liu, JP; Tong, C. [Chchd2 regulates mitochondrial morphology by modulating the levels of Opa1.](#) *Cell Death and Differentiation*. 2020 Jan 6; Article in Press.
3. Buchman, A; Gamez, S; Li, M; Antoshechkin, I; Li, HH; Wang, HW; Chen, CH; Klein, MJ; Duchemin, JB; Crowe, JE, Jr.; Paradkar, PN; Akbari, OS. [Broad dengue neutralization in mosquitoes expressing an engineered antibody.](#) *PLoS Pathogens*. 2020 Jan; 16(1): Article number e1008103.
4. Wang, YC; Ku, WW; Yang, YS; Kao, CC; Kang, FY; Kuo, SC; Chiu, CH; Chen, TL; Wang, FD; Lee, AY. [Is polymicrobial bacteremia an independent risk factor for mortality](#)

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5. Hung, SJ; Hsu, YM; Huang, SW; Tsai, HP; Lee, LYY; Hurt, AC; Barr, IG; Shih, SR; Wang, JR. [Genetic variations on 31 and 450 residues of influenza A nucleoprotein affect viral replication and translation.](#) *Journal of Biomedical Science*. 2020 Jan 6; 27(1): Article number 17.
  6. Chen, HY; Wu, YF; Chou, FC; Wu, YH; Yeh, LT; Lin, KI; Liu, FT; Sytwu, HK. [Intracellular galectin-9 enhances proximal TCR signaling and potentiates autoimmune diseases.](#) *Journal of Immunology*. 2020 Jan 22; Article in Press.
  7. Kuo, SC; Liu, CE; Lu, PL; Chen, YS; Lu, MC; Ko, WC; Hsueh, PR; Chuang, YC; Wang, FD; the SMART Asia-Pacific Group. [Activity of ceftolozane-tazobactam against Gram-negative pathogens isolated from lower respiratory tract infections in the Asia-Pacific region: SMART 2015-2016.](#) *International Journal of Antimicrobial Agents*. 2020 Jan 7; Article in Press.
  8. Yeo, WL; Heng, E; Tan, LL; Lim, YW; Ching, KC; Tsai, DJ; Jhang, YW; Lauderdale, TL; Shia, KS; Zhao, H; Ang, EL; Zhang, MM; Lim, YH; Wong, FT. [Biosynthetic engineering of the antifungal, anti-MRSA auroramycin.](#) *Microbial Cell Factories*. 2020 Jan 6; 19: Article number 3.
  9. Tan, BH; Chakrabarti, A; Patel, A; Chua, MMM; Sun, PL; Liu, Z; Rotjanapan, P; Li, R; Wahyuningsih, R; Chayakulkeeree, M; Chen, YC. [Clinicians' challenges in managing patients with invasive fungal diseases in seven Asian countries: An Asia fungal working group \(AFWG\) survey.](#) *International Journal of Infectious Diseases*. 2020 Jan 13; Article in Press.
  10. hHuang, SH; Wu, CH; Chen, SJ; Sytwu, HK; Lin, GJ. [Immunomodulatory effects and potential clinical applications of dimethyl sulfoxide.](#) *Immunobiology*. 2020 Jan 22; Article in Press.
  11. Chang, CM; Shih, HI; Wu, CJ; Lauderdale, TL; Lee, NY; Lee, CC; Chen, YC; Huang, CC; Ko, WC. [Fluoroquinolone resistance in Haemophilus influenzae from nursing home residents in Taiwan: Correlation of MICs and mutations in QRDRs.](#) *Journal of Applied*

*Microbiology. 2020 Jan 17; Article in Press.*

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

1. Buchman, A; Gamez, S; Li, M; Antoshechkin, I; Li, HH; Wang, HW; Chen, CH; Klein, MJ; Duchemin, JB; Crowe, JE, Jr.; Paradkar, PN; Akbari, OS. [Broad dengue neutralization in mosquitoes expressing an engineered antibody](#). *PLoS Pathogens. 2020 Jan; 16(1): Article number e1008103.*
2. Hung, SJ; Hsu, YM; Huang, SW; Tsai, HP; Lee, LYY; Hurt, AC; Barr, IG; Shih, SR; Wang, JR. [Genetic variations on 31 and 450 residues of influenza A nucleoprotein affect viral replication and translation](#). *Journal of Biomedical Science. 2020 Jan 6; 27(1): Article number 17.*

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

1. Wu, KJ; Chen, YH; Bae, EK; Song, Y; Min, W; Yu, SJ. [Human milk Oligosaccharide 2'-Fucosyllactose reduces neurodegeneration in stroke brain](#). *Translational Stroke Research. 2020 Jan 2; Article in Press.*
2. Fang, CP; Wang, SC; Tsou, HH; Chung, RH; Hsu, YT; Liu, SC; Kuo, HW; Liu, TH; Chen, ACH; Liu, YL. [Genetic polymorphisms in the opioid receptor delta 1 \(OPRD1\) gene are associated with methadone dose in methadone maintenance treatment for heroin dependence](#). *Journal of Human Genetics. 2020 Jan 7; Article in Press.*
3. Chen, WT; Wang, N; Lin, KC; Liu, CY; Chen, WJ; Chen, CY. [Childhood social context in relation to alcohol expectancy through early adolescence: A latent profile approach](#). *Drug and Alcohol Dependence. 2020 Mar 1; 208: Article number 107851.*
4. Wang, SH; Lai, RY; Lee, YC; Su, MH; Chen, CY; Hsiao, PC; Yang, AC; Liu, YL; Tsai, SJ; Kuo, PH. [Association between polygenic liability for schizophrenia and substance involvement: A nationwide population-based study in Taiwan](#). *Genes, Brain, and Behavior. 2020 Jan 10; Article in Press.*
5. Liu, YL; Kuo, HW; Fang, CP; Tsung, JH; Chen, ACH. [Adhesion molecules as potential novel biomarkers for opioid dependence](#). *Current Pharmaceutical Design. 2020 Jan 16;*



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### **Immunology Research Center**

1. Lai, CY; Yeh, DW; Lu, CH; Liu, YL; Chuang, YC; Ruan, JW; Kao, CY; Huang, LR; Chuang, TH. [Epigenetic silencing of ubiquitin specific protease 4 by snail1 contributes to macrophage-dependent inflammation and therapeutic resistance in lung cancer.](#) *Cancers.* 2020 Jan 8; 12(1): Article number 148.
2. Keshari, S; Wang, Y; Herr, DR; Wang, SM; Yang, WC; Chuang, TH; Chen, CL; Huang, CM. [Skin cutibacterium acnes mediates fermentation to suppress the calcium phosphate-induced itching: A butyric acid derivative with potential for uremic pruritus.](#) *Journal of Clinical Medicine.* 2020 Jan 22; 9(2): Article number 312.
3. Yang, JJ; Huang, YC; Chuang, TH; Herr, DR; Hsieh, MF; Huang, CJ; Huang, CM. [Cysteine-capped hydrogels incorporating copper as effective antimicrobial materials against methicillin-resistant staphylococcus aureus.](#) *Microorganisms.* 2020 Jan 21; 8(2): Article number 149.
4. Tan, T. [Induction of TRAF2-mediated DUSP14/MKP6 ubiquitination by PRMT5-mediated arginine methylation.](#) *Molecular Biology of the Cell.* 2018 Dec; 29(26): Abstract number P1574.

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

1. Lin, YY; Lee, YH; Chang, SC; Lee, DC; Lu, KY; Hung, YM; Chang, YP. [Individual resilience, intention to stay, and work frustration among postgraduate two-year programme nurses\[Erratum: Collegian. 2019 Aug; 26\(4\): 435-440.\].](#) *Collegian.* 2020 Jan 14; Article in Press.

### **Graduate Student Program**

1. Chen, TC; Chuang, JY; Ko, CY; Kao, TJ; Yang, PY; Yu, CH; Liu, MS; Hu, SL; Tsai, YT; Chan, H; Chang, WC; Hsu, TI. [AR ubiquitination induced by the curcumin analog suppresses growth of temozolomide-resistant glioblastoma through disrupting GPX4-](#)

- [Mediated redox homeostasis](#). *Redox Biology*. 2019 Dec 26; 30: Article number 101413.
2. Huang, LK; Chao, SP; Hu, CJ. [Clinical trials of new drugs for Alzheimer disease](#). *Journal of Biomedical Science*. 2020 Jan 6; 27: Article number 18.
  3. Ali, AAA; Shahrer, RA; Chen, KY. [Efficient labeling of mesenchymal stem cells for high sensitivity long-term MRI monitoring in live mice brains](#). *International Journal of Nanomedicine*. 2020 Jan 8; 15: 97-114.
  4. Huang, LK; Tsai, JC; Lee, HH; Kuan, YC; Lee, YT; Lin, CP; Chao, SP; Hu, CJ. [Dementia screening for elderly in-patients and its association with nursing care satisfaction-an observational study](#). *Medicine*. 2020 Jan; 99(2): Article number e18741.