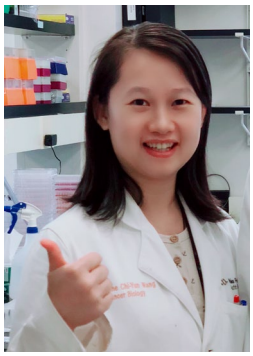


## Chi-Yun Wang

## 王琪芸

TEL: 886-937945409

E-mail: chiyunw@gmail.com


**EDUCATION**

| | |
|---|---|
| 2006/09-2012/06 | Ph.D., Institute of Basic Medical Sciences<br>National Cheng Kung University Medical College, Tainan, Taiwan |
| 2004/09-2006/06 | M.S., Institute of Molecular Medicine<br>National Cheng Kung University Medical College, Tainan, Taiwan |
| 2000/09-2004/06 | B.S., Department of Medical Technology,<br>Chung-Shan Medical University, Taichung, Taiwan |

**EXPERIENCE**

| | |
|---|---|
| 2020/8-now | **Assistant Professor**<br>International Ph.D. Program in Innovative Technology of Biomedical Engineering and Medical Devices, Research Center for Intelligent Medical Devices<br>Ming Chi University of Technology |
| 2025 | Member of TSBE (Taiwan Society of Biomedical Engineering) |
| 2023 | Practical Training on ISO 10993 Biocompatibility Testing for Medical Devices, Industrial Technology Research Institute<br>工業技術研究院-醫療器材生物相容性試驗 ISO10993 實務培訓 |
| 2022 | Training in Taiwan University for Executive Biodesign Biomedical technology Innovative Program<br>台灣大學推廣教 Executive Biodesign 高階經理人醫療器材創新設計專班第一期 |
| 2020 | Member of BCRS（Chinese Taipei Society for Biomaterials and Controlled Release） |
| 2020/8-now | **Center Member**<br>Research Center for Intelligent Medical Devices |

| | |
|---|---|
| 2021/1-now | **Assistant Research Fellow (Joint Appointment)**<br>Bone and Joint Research Center<br>Linkou Chang Gung Medical Foundation |
| 2018/10-2020/7 | Postdoctoral Research Fellow<br>Bone and Joint Research Center<br>Linkou Chang Gung Medical Foundation |
| 2015/08- 2018/08 | Postdoctoral Research Fellow-Senior Scientist<br>Department of Cancer Biology<br>Wake Forest Baptist Medical Center |
| 2014/03- 2015/08 | Postdoctoral Research Fellow<br>Department of Molecular and Cellular Oncology<br>MD Anderson Cancer Center, Houston, Texas, USA |
| 2012/07-2014/01 | **Postdoctoral Fellow**<br>Institute of Clinical Medicine<br>National Cheng Kung University Medical College, Tainan, Taiwan |

**RESEARCH INTERESTS**

Chondrogenic and bone Tissue engineering, Organ-on-Chip, Tendon repair, Biomaterials.

**HONORS AND AWARDS**

| | |
|---|---|
| 2025 | BCRS（Chinese Taipei Society for Biomaterials and Controlled Release）-YICA (Young Investigator Competition Award)<br>2025 中華民國生醫材料及藥物制放學會 年輕學者獎 |
| 2024 | Teaching Innovation Award, College of Engineering, Academic Year 113<br>113學年度工程學院教學創新獎 |
| 2024 | Departmental Teaching Dedication Award, Ph.D. Program in Biomedical and Materials Science, Academic Year 113<br>113學年度生醫暨醫材博士學位學程系級教學奉獻獎 |
| 2024 | 2024 Taiwan Innotech Expo-Silver Medal Award<br>2024台灣創新技術博覽會發明競賽 銀牌獎<br>Modified Nanofiber Multilayer Structure and Its Preparation<br>改質奈米纖維層體及其製法 |
| 2023 | 2023 Taiwan Innotech Expo-Silver Medal Award<br>2023台灣創新技術博覽會發明競賽 銀牌獎<br>Glass-Ceramic Composite Material<br>玻璃陶瓷復合材料 |

| | |
|---|---|
| 2023 | 2023 Taiwan Innotech Expo-Silver Medal Award<br>2023台灣創新技術博覽會發明競賽 銀牌獎<br>Preparation Method of Nanocomposite Multilayer Structure<br>奈米複合層體之製法 |
| 2023 | 第18屆台塑企業應用技術研討會 研發創意實物獎 學校組 第三名 |
| 2020-2025 | As the Reviewer of international journals, including International Journal of Biological Macromolecules, Carbohydrate Polymer, Biomedical Material, BioTech, Gels, Advanced Composites and Hybrid Materials. |
| 2022 | "2022 Taiwan Medical Technology Exhibition Industry Internship" leaded high school and doctoral students to explore technological innovation and cross-domain applications in medical, health and care, connect with new trends in medical technology and industry trends, and introduce the implementation aspect of STEM projects. |
| 2022 | Recommended as an Outstanding teacher by Ming Chi University of Science and Technology (EMI lecture) |
| 2022 | 2022 National Technical College Students Practical Topic Production Competition and Achievements Exhibition Passed the Preliminary competition.<br>Study on the application of dynamic compression to improve the properties of nucleus pulposus cells in intervertebral disc tissue engineering.<br>Student: Sophomore student in the Department of Mechanical Engineering, Ming Chi University of Science and Technology<br>教育部 2022 年全國技專校院學生實務專題製作競賽入圍證明書 |
| 2022 | Higher Education Deepening Plan: 110 Digital Textbook Subsidy Project (Host) Awarded for Excellent Work<br>Applying biomedical information digital textbooks to introductory medical engineering courses |
| 2022 | Higher Education Deepening Plan: 110 Practical Textbook Subsidy Plan (Host) Awarded for Excellent Work<br>Cell organelle model making |
| 2021 | "2021 Taiwan Medical Technology Exhibition Industry Internship" leads students to explore technological innovations and cross-domain applications in medical, health and care, and keep pace with new trends in medical technology and industry trends. |
| 2021 | 2021 Annual Meeting of the Society of Biomedical Materials and Drug Manufacturing of the Republic of China and 2021 Engineering Medicine Scientific Achievements Presentation of the Department of Science and Technology, Ministry of Science and Technology **Serve as a judge for the student oral paper competition** |

| | |
|---|---|
| 2021 | Best Paper Award in Biomaterials International 2021 |
| 2021 | Recommended as an **Outstanding teacher** by Ming Chi University of Science and Technology |
| 2020 | Higher Education Deepening Plan: 109 Digital Textbook Subsidy Project (Host)<br>**Awarded for Excellent Work**<br>Introduction to Medical Engineering uses industry case sharing and presentations on novel research |
| 2020 | 2021 Become Member of Biomaterials and Controlled Releases Society |
| 2020 | 2020 Science and Technology International Cooperation Research Symposium (Invited Oral Presenter) |
| 2019 | Best Paper Award of Chang Gung International Medical Research Conference |
| 2012 | Travel Award of National Science Council (NSC), Taiwan. |
| 2011 | Outstanding Students Conference Travel Award from the foundation for the Advancement of Outstanding Schorlarship (ASCB) |
| 2009 | Merck Young Scientist Award Honorable Mention |
| 2009 | Outstanding Students Conference Travel Award from the foundation for the Advancement of Outstanding Schorlarship (ASCB) |
| 2008 | Best Paper Award of International Symposium on Cell Signaling and Gene Regulation, Tainan, Taiwan |

**FIELDS OF SPECIALTY**

| | |
|---|---|
| Tissue engineering | Microenvironment construct, 4D (3D dynamic) cell culture, Bone and Intervertebral Disc Tissue Degenerative Model construct. |
| Biomaterial | Hydrogel (gelatin sponge construct), Bone materials (Ceramics, Titanium), Biocompatibility of Biomaterials, Cell-membrane nanoparticle, Nano-silver/iron particle, Surface coating. |
| Molecular Biology | Nicked CRISPR; Site-directed mutagenesis; Cloning; Microarray; Proteomics; recombinant protein preparation and purification. |

| | |
|---|---|
| Biochemistry | Nucleic acid, amino acids, Protein and Glucose Metabolism |
| Cell Biology | Cytotoxicity, Signal transduction, Cell cycle progression, Apoptosis and Autophagy, Stem cell handling. |
| Tumor biology | Cancer metastasis; Cancer metabolomics; |
| Animal model | Intraperitoneal injection; Intravenous injection; subcutaneous injection; Orthotopic liver and breast cancer model;<br>Mice hair growth model and wound healing model;<br>Bone marrow derived macrophage isolation; Rat caudal Intervertebral Disc Tissue Degenerative Model |
| Immunology | Innate immunity and adaptive immunity; Cancer immune surveillance. |

**LECTURE**

| |
|---|
| Introduction to Biomedical Engineering |
| Biochemistry |
| Molecular Biology |
| Precision Medicine |
| Antibody Engineering |
| Advanced Biotechnology |
| Tissue Engineering & Regenerative Medicine |
| Cellular Biotechnology |
| Medical Device Design and Development, BioXDesign |
| Seminar/ Presentation Training |
| Bioinformation |
| Biomaterials |

**PUBLICATION**

1. C. C. Hsu[1], **C. Y. Wang[1]**, R. K. Manne[1], Z. Cai, V. Penugurti, R. Kant, L. Bai, B. Syong-Pan, T. Chen, Y. R. Chen, H. E. Wu, Y. Jin, H. Gu, C. Y. Li, H. K. Lin*. **2025.03** ALDH4A1 functions as an active MPC complex maintaining mitochondrial pyruvate import for TCA cycle entry and tumor suppression. ***Nat. Cell Biol,*** 27: 847–862. (SCI, IF:17.3 Rank: Q1 in Cell Biology (9/205), Top 4.39%).
2. Edouard Gnoumou[1], Thi Tam An Tran[1], Tsan-Tzu Yang[1,2], Thi Thu The Quach[1,2], **C. Y. Wang***. **2025.05** Anti-bacterial, Anti-inflammatory and Anti-osteoclastogenic Effects

of Synthetic Mineralized Lysozyme Nanoparticles for Treating Infectious Osteoporosis. ***International Journal of Biological Macromolecules***, 320: 145769. (SCI, IF: 8.5, Rank: Q1 in Chemistry, Applied (6/74), Top 8.1%).

3. Hung, G. Y., Xia, Y. Z., Chen, P. Y., Lai, P. L., Feng, K. C., Tu, C. S., Cheng, I. C., **C. Y. Wang***. **2025. 04** Doping ratio between ZnO/MgO tunes antimicrobial, osteogenic, and anti-osteoclast activity of CaO-MgO-ZnO-SiO2 bioactive glass-ceramics. ***Ceramics International,*** 51: 30436 (SCI, IF:5.1 Rank: Q1 in Materials Science, Ceramics (3/31), Top 9.7%)
4. Y. W. Tsai, Q. V. Le, N. T. D. Hanh, B. L. Liu, P. Srinophakun, **C. Y. Wang**, C. Y. Chiu, K. H. Chen, Y. K. Chang. **2025.07** Optimization of flow dynamics in single-pass and recirculating systems for enhanced *Escherichia coli* removal efficiency using polyhexamethylene biguanide (PHMB) modified PAN-based nanofiber membranes. ***Sep. Purif. Technol.*** (SCI, IF: 8.2, Rank: Q1 in engineering, chemical (15/170), Top 8.82%)
5. G. Y. Hung, **C. Y. Wang**, K. C. Feng, C. S. Tu, I. C. Cheng, H. Mana-Ay, H. Y. Hsiao, P. L. Lai, P. Y. Chen. **2025.04** Manipulating Mg/Ca ratios in MgO-CaO-SiO2 bioactive glass for achieving accelerated osteogenic differentiation of human adipose-derived stem cells. ***Biomaterials Advances,*** (SCI, IF: 5.5, Rank: Q1 in Materials Science, Biomaterials (14/53), Top 26.4%)
6. Y. J. Wu, **C. Y. Wang**, H. Mana-ay, C. S. Tu, P. L. Lai, P. Y. Chen. **2025.** Achieving high surface bioactivity and adhesion in Ti-6Al-4V alloy via anodic oxidation and electrophoretic deposition. ***Ceramics International***, 169: 214189 (SCI, IF: 5.1, Rank: Q1 in Materials Science, Ceramics (3/31), Top 9.7%)
7. P. J. Naig, Z. Y. Kuo, M. F. Chung, C. H. Chen, **C. Y. Wang**, K. Y. Hung *. **2025.01** Enhancing Bone Regeneration Using Blended Poly (L-lactide-co-D, L-lactide) and β-Tricalcium Phosphate Nanofibrous Periodontal Biodegradable Membranes. ***Polymers***, 17: 256 (SCI, IF: 4.7, Rank: Q1 in Polymer Science (19/95), Top 20%)
8. J. H. Yang, Q. V. Le, B. L. Liu, P. Srinophakun, **C. Y. Wang**, C. Y. Chiu, I. S. Ng, K. H. Chen, Y. K. Chang. **2025.** Enhanced antimicrobial performance of single-use polyamide 56 nanofiber membranes modified with chitosan, reactive dyes, and poly (hexamethylene biguanide)(PHMB) for biological waste treatments. ***Biochem. Eng. J.***, 213:109538 (SCI, IF: 3.7, Rank: Q2 in Biotechnology & Applied Microbiology (54/174), Top 31.0%)
9. D. T. M. Huong, **C. Y. Wang**, P. Yi. Chen, C. W. Ooi, X. E. C. Thew, B. L. Liu, C. Y. Chiu, S. L. Tsai, K. H. Chen, Y. K. Chang. **2024.05** Immobilization of poly (hexamethylene biguanide) to cellulose acetate-and cellulose-based nanofiber

membranes for antibacterial and cytotoxic studies. ***Biochem. Eng. J.,*** 205:109256 (SCI, IF: 3.7, Rank: Q2 in Biotechnology & Applied Microbiology (54/174), Top 31.0%)

10. Y. T. Chen, H. Y. Hsiao, **C. Y. Wang**, C. S. Tu, K. C. Feng, H. Mana-ay, S. Y. Kung, P. Y. Chen, P. L. Lai. **2024.03** Improving bioactivity in 3D-printed Ti-6Al-4V alloy scaffold via CaO-MgO-SiO2 glass-ceramic coating. 2024. ***J. Alloy. Compd.,*** 976: 173387 (SCI, IF: 5.8, Rank: Q2 in Chemistry, Physical (51/178), Top 28.65%)
11. T. T. T. An , E. Gnoumou , B. L. Liu, P. Srinophakun, C. Y. Chiu, **C. Y. Wang***, K. H. Chen*, Y. K. Chang*. **2024**. Highly efficient capture of Escherichia coli using chitosan-lysozyme modified nanofiber membranes: Potential applications in food packaging and water treatmen. ***Biochem. Eng. J***. 210: 109411. (SCI, IF: 3.7, Rank: Q2 in Biotechnology & Applied Microbiology (54/174), Top 31.0%)
12. E. Gnoumou, T. T. A. Tran, P. Srinophakun, BL. Liu, CY. Chiu, H. C. Lee, **C. Y. Wang***, K. H. Chen*, Y. K. Chang*. **2024.04** Optimization of lysozyme-modified ion exchange nanofiber membrane for efficient capture of Escherichia coli: Antibacterial and cytotoxic studies. ***Journal of the Taiwan Institute of Chemical Engineers***, 157: 105400. (SCI, IF: 5.5, Rank: Q1 in Engineering, Chemical (31/170), Top 18.24%)
13. Zhang YC, Le QV, Gnoumou E, Liu BL, Srinophakun P, **C. Y. Wang,** Chiu CY, Ng IS, Chen KH, Chang YK. **2024.11** Fabrication and characterization of antibacterial nanofiber membranes modified with chitosan and imidazolidinyl urea for potential use in biological waste treatments. ***International Journal of Biological Macromolecules,*** 279(Pt 4): 135364. (SCI, IF: 7.7, Rank: Q1 in Chemistry, Applied (6/74), Top 8.1%)
14. Wen HY, Le QV, Liu Bl, Srinophakun P, Chiu CY, **C. Y. Wang**, Ng IS, Chen KH, Chang YK. **2024.11** Alginate and chitosan-based polyamide 56 modified nanofiber membrane for highly effective capture of Escherichia coli: Antibacterial and cytotoxicity studies. ***International Journal of Biological Macromolecules,*** 279(Pt 4): 135464. (SCI, IF: 7.7, Rank: Q1 in Chemistry, Applied (6/74), Top 8.1%).
15. Hsieh, M.-K., **C. Y. Wang**, Kao, F.-C., Su, H.-T., Chen, M.-F., Tsai, T.-T., Lai, P.-L. **2024**. Local application of zoledronate inhibits early bone resorption and promotes bone formation. ***JBMR Plus*** 8, ziae031. (SCI, IF: 3.4 Rank: Q2 in Endocrinology & Metabolism (72/186), Top 38.4%)
16. Hung, G.-Y., **C. Y. Wang**, Hsiao, H.-Y., Tu, C.-S., Mana-Ay, H., Chen, C.-T., Lai, P.-L., Feng, K.-C., Chen, P.-Y., **2024.07** Composite bone graft of CaO-MgO-$SiO_2$ glass-ceramics and $CaSO_4$ ceramics for boosting bone formation rate. ***Journal of Materials Chemistry B,*** 12, 6394–6409. (SCI, IF:6.1 Rank Q1 in Biomedical Engineering

(11/53), Top 11.59%).

17. T. M. H. Dinh, B. L. Liu, P. Srinophakun, **C. Y. Wang**, C. Y. Chiu, S. L. Tsai, K. H. Chen, Y. K. Chang. **2024.11** Long-term and high-efficiency capture of Escherichia coli using cellulose acetate nanofiber membrane functionalized with reactive 19 dye and polyhexamethylene biguanide. ***Biochem. Eng. J.,*** 211:109474 (SCI, IF: 3.7, Rank: Q2 in Biotechnology & Applied Microbiology (54/174), Top 31.0%)
18. Q. V. Le, B. L. Liu, P. Srinophakun, J. Y. Shih, **C. Y. Wang**, C. Y. Chiu, S. L. Tsai, K. H. Chen, Y. K. Chang. **2024.06** Highly efficient capture of E. coli using amidoximated polyacrylonitrile nanofiber membrane immobilized with reactive green 19 dye/polyhexamethylene biguanide: Antibacterial and cytotoxicity studies. ***Sep. Purif. Technol.*** (SCI, IF: 8.2, Rank: Q1 in Engineering, Chemical (15/170), Top 8.8%)
19. Wu YJ, **C. Y. Wang**, Feng KC, Chien RR, Haidee Mana-ay, Kung SY, Hou KH, Tu CS, Chen PY, Lai PL. **2023** Ti-6Al-4V intervertebral fusion cage with compatible stiffness, enhanced fatigue life, and osteogenic differentiation***. Journal of Alloys and Compounds,*** 957: 170450. (SCI, IF: 5.8, Rank: Q1 in Physical chemistry (51/178), Top 5.16%)
20. G.Y. Hung, P. Y. Chen, **C. Y. Wang**, C. S. Tu, C. S. Chen, P. L. Lai, K. C Feng. **2023**. Tailoring bioactive and mechanical properties in polycrystalline CaO–SiO2–P2O5 glass-ceramics ***Ceramics International,*** 49: 7289-7298. (SCI, IF:5.1, Rank: Q1 in Material Science, Ceramics (3/31), Top 8.9%).
21. Hsieh, M.-K., Liu, P.-Y., Li, Y.-D., **C. Y. Wang**, Hu, C.-C., Tai, C.-L., Lai, P.-L., **2023** The role of counter-torque holders in tightening of pedicle screw-rod constructs: a biomechanical study in a porcine model. ***Spine Journal,*** 23, 315–324. (SCI, IF: 4.9, Rank: Q1 in Orthopedics (5/136), Top 2.19%).
22. **C. Y. Wang**, M. K. Hsieh, Y. J. Hu, A. Bit and P. L. Lai. **2022**. Monocarboxylate transporter 1-mediated lactate accumulation promotes nucleus pulposus degeneration under hypoxia in a 3D multilayered nucleus pulposus degeneration model. ***European Cells and Materials***, 43:53-65. (SCI, IF: 3.2, Rank: Q1 in Orthopedics (18/136), Top 19.51%).
23. Jheng-Yu Wu, **C. Y. Wang**, Kuei-Hsiang Chen, You-Ren Lai, Chen-Yaw Chiu, Hung-Che Lee and Yu-Kaung Chang. **2022**. Electrospinning of Quaternized Chitosan-Poly(vinyl alcohol) Composite Nanofiber Membrane: Processing Optimization and Antibacterial Efficacy. ***Membranes***, 12: 332. (SCI, IF: 3.3, Rank: **Q2** in Polymer science (36/95), Top 23.33%).
24. Nihal Engin Vrana, Sharda Gupta, Kunal Mitra, Albert A Rizvanov, Valeriya V Solovyeva, Ezgi Antmen, Majid Salehi, Arian Ehterami, Lea Pourchet, Julien Barthes,

Christophe A Marquette, Magnus von Unge, **C. Y. Wang**, Po-Liang Lai, Arindam Bit. **2022**. From 3D printing to 3D bioprinting: the material properties of polymeric material and its derived bioink for achieving tissue specific architectures. ***Cell and tissue banking***. (SCI, IF: 1.4, Rank: Q4 in Biomedical Engineering (99/123), Top 87.64%) (Review paper)

25. Ming-Kai Hsieh, **C. Y. Wang**, Chia-Jung Wu, Ying-Cen Chen, Shinn-Chih Wu, Wei-Hsing Tuan, Po-Liang Lai. **2022**. Strontium sintered calcium sulfate bone graft for enhancing osteogenesis in a rat femoral defect model. ***Materials Today Communications***, 30, 103050. (SCIE, IF: 3.7, Rank: Q2 in Materials science, multidisciplinary (176/439), Top 49.4%)
26. Ching-Chien Chiang, Ming-Kai Hsieh, **C. Y. Wang**, Wei-Hsing Tuan, Po-Liang Lai **2021**. Cytotoxicity and cell response of preosteoblast in calcium sulfate-augmented PMMA bone cement. ***Biomedical Materials,*** 16 (5), 055014. (SCI, IF: 3.9, Rank: Q2 in Biomedical Engineering (42/123), Top 43.82%)
27. Jheng-Yu Wu, Chien Wei Ooi, Cher Pin Song, **C. Y. Wang**, Bing-Lan Liu, Guan-Yu Lin, Chen-Yaw Chiu, Yu-Kaung Chang **2021**.. Antibacterial efficacy of quaternized chitosan/poly (vinyl alcohol) nanofiber membrane crosslinked with blocked diisocyanate. ***Carbohydrate Polymers***, 262, 117910, 2021.(SCI, IF: 10.7, Rank: Q1 in Polymer science (3/95), Top 3.3%)
28. Kuei-Chih Feng, Yu-Jie Wu, **C. Y. Wang**, Chi-Shun Tu, Yu-Ling Lin, Cheng-Sao Chen, Po-Liang Lai, Yu-Tzu Huang, Pin-Yi Chen **2021**. Enhanced mechanical and biological performances of CaO-MgO-SiO(2) glass-ceramics via the modulation of glass and ceramic phases. ***Materials Science & Engineering C-Materials for Biological Applications***, 124:112060. (SCI, IF: 8.1, Rank: Q1 in Materials science, Biomedicals (8/53), Top 17.07%)
29. Fan-Xuan Xu, Chien Wei Ooi, Bing-Lan Liu, Cher Pin Song, Chen-Yaw Chiu, **C. Y. Wang**, Yu-Kaung Chang. **2021**. Antibacterial efficacy of poly(hexamethylene biguanide) immobilized on chitosan/dye-modified nanofiber membranes. ***International Journal of Biological Macromolecules***, 181, 508-520, 2021. (SCI, IF: 7.7, Rank: Q1 in Polymer science (6/95), Top 6.67%)
30. Cai Z, Li C-F, Han F, Liu C, Zhang A, Hsu C-C, Peng D, Zhang X, Jin G, Rezaeian A-H, Wang G, Zhang W, Pan B-S, **C. Y. Wang**, Wang Y-H, Wu S-Y, Yang S-C, Hsu F-C, D'Agostino R B, Furdui C M, Kucera G L, Parks J S, Chilton F H, Huang C-Y, Tsai F-J, Pasche B, Watabe K and Lin H-K. **2020** Phosphorylation of PDHA by AMPK Drives TCA Cycle to Promote Cancer Metastasis. ***Molecular Cell,*** 80: 263. (SCI, IF: 14.5 Rank: Q1 in Biochemistry & Molecular biology (7/313), Top 1.93%)

31. **C. Y. Wang**, Kuo, Z. K., Hsieh, M. K., L. Y. Ke, C. C. Chen, C. M. Cheng, P. L. Lai. **2019** Cell migration of preosteoblast cells on a clinical gelatin sponge as a 3D bone engineering model. ***Biomedical Materials,*** 15 (1), 015005. (SCI, IF: 3.9, Rank: Q2 in Biomedical Engineering (42/123), Top 25.7%)
32. Ku, K. L., Wu Y.S., **C. Y. Wang**, D. W. Hong, Z. X. Chen, C. A. Huang, I. M. Chu, P.L. Lai **2019** Incorporation of surface-modified hydroxyapatite into poly(methyl methacrylate) to improve biological activity and bone ingrowth. ***Royal Society Open Science,*** 6: 182060. (SCI, IF: 2.9, Rank: Q1 in Multidisciplinary Sciences (32/134), Top 24.1%)
33. Han F., C. F. Li, Z. Cai, X. Zhang, G. Jin, W.N. Zhang, C. Xu, **C. Y. Wang**, Morrow J, S. Zhang, D. Xu, G. Wang, H.K. Lin. **2018** The critical role of AMPK in driving Akt activation under stress, tumorigenesis and drug resistance. ***Nature Communications,*** 9(1) 4728. (SCI, IF: 14.7, Rank: Q1 in Multidisciplinary Sciences (8/134), Top 7.5%)
34. Zhang, X., B.K. Li, A.H. Rezaeian, X.H. Xu, P.C. Chou, G. Jin, F. Han, B.S. Pan, **C. Y. Wang**, J. Long, A.M. Zhang, C.Y. Huang, F.J. Tsai, C.H Tsai, C. Logothetis, H.K. Lin. **2017**. H3 ubiquitination by NEDD4 regulates H3 acetylation and tumorigenesis. ***Nature Communications,*** 8: 14799. (SCI, IF: 14.7, Rank: Q1 in Multidisciplinary Sciences (8/134), Top 7.5%)
35. Jin, G.X., Lee, S.W., Zhang, X., Z. Cai, Y. Gao, P.C. Chou, A.H. Rezaeian, F. Han, **C. Y. Wang**, J.C. Yao, Z.H. Gong, C.H. Chan, C.Y. Huang, F. J. Tsai, C.H. Tsai, S.H. Tu, C.H. Wu, D.D. Sarbassov, Y.S. Ho, H.K. Lin. **2015** Skp2-Mediated RagA Ubiquitination Elicits a Negative Feedback to Prevent Amino-Acid-Dependent mTORC1 Hyperactivation by Recruiting GATOR1. ***Molecular Cell,*** 58: 989-1000. (SCI, IF: 14.5 Rank: Q1 in Biochemistry & Molecular biology (7/313), Top 1.9%)
36. **C. Y. Wang**, Yang T.T., Chen C.L., C. F. Lin. **2014** Reactive oxygen species-regulated glycogen synthase kinase-3β activation contributes to all-*trans* retinoic acid-induced apoptosis in granulocyte-differentiated HL60 cells. ***Biochemical Pharmacology,*** 88:86-94. (SCI, IF: 5.3, Rank: Q1 in Pharmacology and Pharmacy (35/354), Top 8.9%)
37. **C. Y. Wang**, C.F.Lin. **2014** Annexin A2: its molecular regulation and cellular expression in cancer development. ***Disease Markers,*** 308976. (Invited review) (SCI, IF: 3.464, Rank: Q2 in Pathology (33/77), Top 33.6%)
38. **C. Y. Wang,** T. H. Chiang, C. L. Chen, P. C. Tseng, S. Y. Chien, Y. J. Chuang, T. T. Yang, C. Y. Hsieh, P. C. Choi, C. F. Lin**. 2014** Autophagy facilitates cytokine-induced ICAM-1 expression. ***Innate Immunity,*** 20:200-213. (SCI, IF: 2.8, Rank: Q2 in Immunology (57/148), Top 38.2%).

39. Yang T.T., C.L. Chen, W. C. Lin, Y.S. Lin, P.C. Tseng, C. Y. Hsieh, Y. H. Chen, W. C. Huang, C. C. Tsai, **C. Y. Wang**, C. C. Shieh, and C. F. Lin. **2013** Glycogen synthase kinase-3β inactivation is an intracellular marker and regulator for endotoxemic neutrophilia. ***Journal of Molecular Medicine-Jmm,*** 91:207-217. (SCI, IF: 4.8, Rank: Q1 in Medicine, Research and Experimental (45/189), Top 14.3%)
40. **C. Y. Wang**, C. L. Chen, Y. L. Tseng, Y. T. Fang, Y. S. Lin, W. C. Su, C. C. Chen, C. C. Chang, Y. C. Wang, and C. F. Lin. **2012**. Annexin A2 silencing induces G2 arrest of non-small cell lung cancer cells through p53-dependent and -independent mechanisms. ***Journal of Biological Chemistry,*** 287: 32512-32524. (SCI, IF: 4.0, Rank: Q1 in Biochemistry and Molecular Biology (100/313), Top 21.3%)
41. **C. Y. Wang,** T. H. Chiang, S. Y. Chien, P. C. Tseng, T. T. Yang, J. J. Chuang, C. L. Chen, C. F. Lin. **2012**. Under Bcl-2 surveillance, cytokines, autophagy-dependently, induce p53-independent CD54 expression. ***Journal of Immunology***, 188: 161.4. (SCIE, IF: 3.6, Rank Q1 in Immunology (86/181), Top 13.67%)
42. Fang, Y. T., C. F. Lin, **C. Y. Wang**, A. Robert, and Y. S. Lin. **2012**. Interferon-γ stimulates p11-dependent surface expression of annexin A2 in lung epithelial cells to enhance phagocytosis. ***Journal of Cellular Physiology.*** 227:2775-2787. (SCI, IF: 4.5, Rank: Q1 in Physiology (11/85), Top 16.7%)
43. Tseng, P. C., W. C. Huang, C. L. Chen, B. S. Sheu, Y. S. Shan, C. C. Tsai, **C. Y. Wang**, S. O. Chen, C. Y. Hsieh, and C. F. Lin. **2012**. Regulation of SHP2 by PTEN/AKT/GSK-3β signaling facilitates IFN-γ resistance in hyperproliferating gastric cancer. ***Immunobiology,*** 217:926-934. (SCI, IF: 2.5, Rank: Q3 in Immunology (131/181), Top 50.8%)
44. Chiu, W. H., S. J. Luo, C. L. Chen, J. H. Cheng, C. Y. Hsieh, **C. Y. Wang**, W. C. Huang, W. C. Su, and C. F. Lin. **2012** Vinca alkaloids cause aberrant ROS-mediated JNK activation, Mcl-1 downregulation, DNA damage, mitochondrial dysfunction, and apoptosis in lung adenocarcinoma cells. ***Biochemical Pharmacology.*** 83:1159-1171. (SCI, IF: 5.3, Rank: Q1 in Pharmacology and Pharmacy (35/354), Top 11%)
45. Hsing, C. H., Chen, Y. H., Chen, C. L., Huang, W. C., Lin, M. C., Tseng, P. C., **C. Y. Wang**, Tsai, C. C., Choi, P. C. & Lin, C. F. **2012** Anesthetic propofol causes glycogen synthase kinase-3β-regulated lysosomal/mitochondrial apoptosis in macrophages. **Anesthesiology.** 116: 868-881. (SCI, IF: 6.3, Rank: Q1 in Anesthesiology (1/64), Top 1.7%)
46. Huang, W. C., C. C. Tsai, T. Y. Chen, Y. P. Chen, Y. S. Lin, P. J. Lu, **C. Y. Wang**, Y. L. Cheng, C. Y. Hsieh, C. L. Chen, and C. F. Lin. **2011**.Glucosylceramide synthase inhibitor PDMP sensitizes CML T315I mutant to Bcr-Abl inhibitor and cooperatively

induces glycogen synthase kinase-3-regulated apoptosis. ***FASEB Journal.*** 25:3661-3673. (SCI, IF: 4.4, Rank: Q1 in Biology (15/109), Top 7.65%)

47. Y. L. Cheng, W. C. Huang, C. L. Chen, C. C. Tsai, **C. Y. Wang**, W. H. Chiu, Y. L. Chen, Y. S. Lin, C. F. Chang, C. F. Lin. **2011**.Increased galectin-3 facilitates leukemia cell survival from apoptotic stimuli. ***Biochemical and Biophysical Research Communications.*** 412: 334-340. (SCIE, IF: 2.5, Rank: Q3 in Biophysics (43/77), 42.25%)
48. Chang, Y. P., C. L. Chen, Chen, S. O., Y. S. Lin, C. C. Tsai, W. C. Huang, **C. Y. Wang**, C. Y. Hsieh, P. C. Choi, and C. F. Lin. **2011**. Autophagy facilitates an IFN-γ response and signal transduction. ***Microbes and Infection.*** 13:888-894. (SCI, IF: 2.6, Rank: Q3 in Microbiology (92/161), 35.52%)
49. Hsin, C. H., M. C. Lin, P. J. Tsai, W. C. Huang, J. I. Kai, C. C. Tsai, C. Y. L. Cheng, C. Y. Hsieh, **C. Y. Wang**, Y. P. Chang, Y. H. Chen, C. L. Chen, and C. F. Lin. **2011**. Anesthetic propofol reduces endotoxic inflammation by inhibiting reactive oxygen species-regulated Akt/IKKβ/NF-κB signaling. ***PLoS One.*** e17598. (SCI, IF: 2.9, Rank: Q1 in Multidisciplinary Sciences (32/134), Top 13.52%)
50. Chuang J. J., Y. C. Chuang, W. T. Chang, C. C. Chen, L. I. Hor, A. Huang, P. C. Choi, **C. Y. Wang,** P. C. Tseng, C. F. Lin. 2010. Macrophage migration inhibitory factor regulates interleukin-6 production by facilitating nuclear factor-kappa B activation during Vibrio vulnificus infection. ***BMC Immunology***. 1:1-8 (SCIE, IF: 2.9, Rank: Q3 in Immunology (108/181), Top 52.5%)
51. Lin C. F., C. L. Chen, W. C. Huang, Y. L. Cheng, C. Y. Hsieh, **C. Y. Wang**, and M. Y. Hong. **2010**. Different Types of Cell Death Induced by Enterotoxins. ***Toxins.*** 2: 2158-2176. (SCI, IF: 3.9, Rank: Q1 in Toxicology (23/106), Top 13.70%)
52. Tseng, Y. L., M. H. Wu, H. C. Yang, **C. Y. Wang,** and Lin, C. F. **2010** Autocrine IL-6 regulates GRO-α production in thymic epithelial cells. ***Cytokine.*** 51: 195-201. (SCI, IF: **3.7** , Rank: **Q2** in Immunology (82/181), Top 32.46%)
53. Chen, S.H., Y.W. Wang, J. L.Hsu, H.Y. Chang, **C.Y. Wang**, Shen PT, Chiang CW, Chuang JJ, Tsai HW, Gu PW, Chang FC, Liu HS, Chow NH. **2010**. Nucleophosmin in the pathogenesis of arsenic-related bladder carcinogenesis revealed by quantitative proteomics. ***Toxicology and applied pharmacology,*** 242:126-135 (SCI, IF: 3.3, Rank: Q2 in Toxicology (39/106), Top 11.5%)
54. Kai, J. I., C. C. Tsai, W. C. Huang, **C. Y. Wang**, W. T. Chang, and C. F. Lin. **2010.** Glycogen synthase kinase-3β indirectly facilitates interferon-γ-induced nuclear factor-κB activation and nitric oxide biosynthesis. ***Journal of Cellular***

***Biochemistry,*** 111:1522-1530. (SCI, IF: 3.0, Rank: Q3 in Biochemistry & Molecular Biology (171/313), Top 39.30%)

55. Chang, Y. P., C. C. Tsai, W. C. Huang, **C. Y. Wang**, C. L. Chen, Y. S. Lin, J. I. Kai, Y. L. Cheng, P. J. Tsai, C. Y. Hsieh, S. H. Chen, S. P. Chang, H. S. Liu, and C. F. Lin. **2010**. Autophagy facilitates IFN-g-activated Jak2-STAT1 and cellular inflammation. ***Journal of Biological Chemistry,*** 285:28715-28722. (SCI, IF: 4.0, Rank: Q2 in Biochemistry & Molecular Biology (95/313), Top 17.31%)
56. **C. Y. Wang**, Y. S. Lin, W. C. Su, C. L. Chen, and C. F. Lin. **2009**.Glycogen synthase kinase-3 and Omi/HtrA2 induce annexin A2 cleavage followed by cell cycle inhibition and apoptosis. ***Molecular Biology of the Cell,*** 20:4153-4161. (SCI, IF: 3.1, Rank: Q3 in Cell Biology (127/205), Top 21.3%)
57. Huang, W. C., Y. S. Lin, **C. Y. Wang**, C. C. Tsai, H. C. Tseng, C. L. Chen, P. J. Lu, P. S. Chen, L. Qian, J. S. Hong, and C. F. Lin. **2009.** Glycogen synthase kinase-3 negatively regulates anti-inflammatory interleukin-10 for lipopolysaccharide-induced iNOS/NO biosynthesis and RANTES production in microglial cells. ***Immunology,*** 128:e275-e286. (SCI, IF: **4.9**, Rank: **Q2** in Immunology (51/181), Top 33.23%)
58. Huang, W. C., Y. S. Lin, C. L. Chen, **C. Y. Wang**, W. H. Chiu, and C. F. Lin. **2009.** Glycogen synthase kinase-3β mediates endoplasmic reticulum stress-induced lysosomal apoptosis in leukemia. ***Journal of Pharmacology and Experimental Therapeutics,*** 329:524-531. (SCI, IF: 3.1, Rank: Q1 in Pharmacology & Pharmacy (126/354), Top 15.40%)
59. Wang, Y., W. C. Huang, **C. Y. Wang**, C. C. Tsai, Y. T. Chang, J. I. Kai, and C. F. Lin. **2009**. Inhibiting glycogen synthase kinase-3 prevented endotoxemic acute renal failure by downregulating inflammation and renal cell apoptosis. ***British Journal of Pharmacology,*** 157:1004-1013. (SCI, IF: 6.8, Rank: Q1 in Pharmacology & Pharmacy (19/354), Top 15.05%)
60. Tsai, C. C., J. I. Kai, W. C. Huang, **C. Y. Wang,** Y. Wang, C. L. Chen, Y. T. Fang, Y. S. Lin, R. Anderson, S. H. Chen, C. W. Tsao, and C. F. Lin. **2009**. Glycogen synthase kinase-3β facilitates IFN-γ-induced STAT1 activation by regulating Src homology-2 domain-containing phosphatase 2. ***Journal of Immunology,*** 183:856-864. (SCI, IF: 3.6, Rank: Q2 in Immunology (86/181), Top 13.67%)
61. Cheng, Y. L., **C. Y. Wang**, W. C. Huang, C. C. Tsai, C. L. Chen, C. F. Shen, C. Y. Chi, and C. F. Lin. **2009.** *Satphylococcus aureus* induces microglial inflammation via a glycogen synthase kinase-3β-regulated pathway. ***Infection and Immunity,*** 77:4002-4008. (SCI, IF: 2.9, Rank: Q2 in Infectious Diseases (58/132). Top 18.63%)
62. Lin, C. F., C. C. Tsai, W. C. Huang, **C. Y. Wang**, H. C. Tseng, Y. Wang, J. I. Kai, S.

W. Wang, and Y. L. Cheng. **2008.** IFN-gamma synergizes with LPS to induce nitric oxide biosynthesis through glycogen synthase kinase-3-inhibited IL-10. ***Journal of Cellular Biochemistry,*** 105:746-755. (SCI, IF: 3.0, Rank: Q3 in Biochemistry & Molecular Biology (171/313), Top 39.30%)

**CONFERENCE PAPERS**

1. Sachin Mishra, Ming-Kai Hsieh, Marvella Chenania Kristanto, Tsan-Tzu Yang, Thi Thu The Quach, Po-Liang Lai, **C. Y. Wang***. **2025.08** Alginate Hydrogel with Nanofiber for Intervertebral Disc Degeneration Therapy. *The 7th International Symposium of Materials on Regenerative Medicine (2025 ISOMRM),* Taoyuan, Taiwan **(Merit Poster Paper Award)**
2. Edouard Gnoumou, Thi Tam An Tran, Po-Liang Lai, Ming-Kai Hsieh, Tsan-Tzu Yang, Thi Thu The Quach, **C. Y. Wang***. **2025.08** Mineralized Lysozyme-Conjugated Nanohydroxyapatite: A Potent Antibacterial and Osteoclast-Inhibitory Approach for LPS-Induced Inflammation. *The 7th International Symposium of Materials on Regenerative Medicine (2025 ISOMRM),* Taoyuan, Taiwan
3. Thi Thu The Quach, Thi-Tam-An Tran, Edouard Gnoumou, Po-Liang Lai, Ming-Kai Hsieh, Tsan-Tzu Yang, **C. Y. Wang***. **2025.08** Fabrication and Characterization of BDDE-crosslinked Gelatin Scaffold for Intervertebral Disc Tissue Engineering. *The 7th International Symposium of Materials on Regenerative Medicine (2025 ISOMRM),* Taoyuan, Taiwan
4. Thi-Tam-An Tran, Edouard Gnoumou, Po-Liang Lai, Ming-Kai Hsieh, Tsan-Tzu Yang, Thi Thu The Quach, **C. Y. Wang***. **2025.08** Peptide-Conjugated Nanohydroxyapatite for Localized Alpha-Ketoglutarate Delivery: A Promising Approach to Osteoporotic Bone Regeneration. *The 7th International Symposium of Materials on Regenerative Medicine (2025 ISOMRM),* Taoyuan, Taiwan **(Merit Poster Paper Award)**
5. E. Gnoumoua, **C. Y. Wang***. **2025.01** Innovative Lysozyme-Immobilized Polyglutamate-Nanohydroxyapatite: Unveiling Potent Antibacterial and Anti-Osteoclastogenic Capabilities for Bone Infection Management. *Annual Meeting of the Polymer Society (PST-2025)*, Taichung, Taiwan.
6. T. T. A. Tran, **C. Y. Wang***. **2025.01** Synthetic lysine homopolymer-conjugated nano-hydroxyapatite particles with targeted drug delivery for osteoporosis therapy. *Annual Meeting of the Polymer Society (PST-2025)*, Taichung, Taiwan.
7. T. T. A. Tran, E. Gnoumou, Y. K. Chang, **C. Y. Wang***. **2024.10** Recycling Chicken Egg-White Waste into Highly Effective Antibacterial via Chemical Immobilization onto Modified-Chitosan nanofiber membrane. *International Conference on Smart Devices and Sustainable Energy 2024 (SDSE 2024),* New Taipei, Taiwan.
8. E. Gnoumou, T. T. A. Tran[1], Y. K. Chang, **C. Y. Wang*. 2024.10** Highly Efficient Antibacterial Ion-Exchange Nanofiber Membrane: A Cost-Effective Approach to Recycling Chicken Egg White Waste. *International Conference on Smart Devices and Sustainable Energy 2024 (SDSE 2024)***,** New Taipei, Taiwan.
9. T. T. A. Tran, E. Gnoumou1, Y. K. Chang, **C. Y. Wang***. **2024.08** Recycling Chicken-Egg White Waste Through Immobilization onto Chitosan Modified Polyacrylonitrile

Membrane. *Polymer Engineering & Science International (PESI)*, Tokyo, Japan.

10. E. Gnoumou, T. T. A. Tran, Y. K. Chang, **C. Y. Wang***. **2024.08** Chicken Egg White-Modified Ion Exchange Nanofiber Membrane: A Cost-Effective Route for Repurposing Chicken Egg White Waste for Antibacterial Applications. *Polymer Engineering & Science International (PESI)*, Tokyo, Japan. **(Best Poster Paper Award)**
11. I. C. Cheng, **C. Y. Wang***, P. L. Lai. **2024.07** Effect of Pullulan on Intervertebral Disc Degeneration. *Biomaterials International 2024*, Bangkok, Thailand.
12. T. T. A. Tran, Y. K. Chang, **C. Y. Wang***. **2023.08** Immobilization of lysozyme on chitosan modified nanofiber membrane: Antibacterial Assessment. *The 6th International Symposium of Materials on Regenerative Medicine &Annual Meeting of Biomaterials and Controlled Releases Society (ISOMRM&BCRS)*, Taipei, Taiwan. **(Oral Presentation)**
13. **C. Y. Wang***, Po-Liang Lai, Ming-Kai Hsieh, Yu-Jong Hu, Arindam Bit. **2023.08** Using clinical porous gelatin sponge to establish a 3D Multilayered Intervertebral Disc Degeneration Model. *The 6th International Symposium of Materials on Regenerative Medicine & Annual Meeting of Biomaterials and Controlled Releases Society (ISOMRM&BCRS)*, Taipei, Taiwan.
14. Y. W. Kung, K. T. You, L.H. Chen, C. Jiang, P.L. Lai, **C.Y. Wang***. **2023.07** Dynamic Compression Pressure Regulates Chondrogenic Potential and Immunologic Characteristics of Nucleus Pulposus Progenitor Cells in the 3D Cultured Porous Gelatin Scaffold. *Biomaterials International 2023*, Sapporo, Japan. **(Best Poster Paper Award)**
15. G. Y Hung, Y.Z Xia, P.Y. Chen, P.L. Lai, K.C Feng, C.S. Tu, **C.Y. Wang***. **2023.07** Antibacterial effect and biocompatibility evaluation of novel CaO-MgO-ZnO-SiO2 bioactiveglass-ceramics. *Biomaterials International 2023*, Sapporo, Japan.
16. E. Gnoumou, Y. K. Chang, **C. Y. Wang***. **2023.06** Novel Lysozyme-Immobilized Acidic Nanofiber Membrane with High Antibacterial Efficacy. 18th Formosa Plastics Enterprise Application Technology Symposium, New Taipei City, Taiwan.
17. E. Gnoumou, T. T. A. Tran, Y. K. Chang, **C. Y. Wang***. **2023.02** Antibacterial Efficacy of Lysozyme Immobilized on Acidic Nanofiber membrane. 2nd International Symposium on Advanced Functional Materials (ISAFM2), Malaysia. **(Best Poster Paper Award)**
18. E. Gnoumou, Y. K. Chang, **C. Y. Wang***. **2023.11** Smart antibacterial and anti-inflammatory Lysozyme-Immobilized Acidic Nanofiber Membrane with High Antibacterial Efficacy. *International Conference on Smart Devices and Sustainable Energy* 2023 *(SDSE 2023),* New Taipei City, Taiwan.

19. T. T. A. Tran, E. Gnoumou, Y. K. Chang, **C. Y. Wang***. **2023.11** Smart pH-Responsive Chitosan-Lysozyme Nanofiber Membrane with High Antibacterial and Anti-inflammatory Activities. *International Conference on Smart Devices and Sustainable Energy* 2023 *(SDSE 2023),* New Taipei City, Taiwan.
20. K. T. You, L. H. Chen, C. Jiang, K. P. Fu, Z. X. Li, C. Y. Yang, M. C. Tseng, P. L. Lai, **C. Y. Wang***. **2022.09** Dynamic compression pressure improves 3D cultured-regeneration characteristics of nucleus pulposus progenitor cells. *Annual Meeting of Biomaterials and Controlled Release Society (BCRS)*, Hsichu, Taiwan. **(Best Poster Paper Award)**
21. **C. Y. Wang**, Po-Liang Lai, Ming-Kai Hsieh, Yu-Jong Hu, Arindam Bit. **2021.06** Extracellular lactate accumulation promotes nucleus pulposus degeneration under hypoxia in 3D multilayered intervertebral disc degeneration model. *Biomaterials International 2021*, Kenting, Taiwan. **(Best Poster Paper Award)**
22. **C. Y. Wang**, Kuo Z-K, Hsieh M-K, Ke L-Y, Chen C-C, Cheng C-M and Lai P-L. **2019.10** Cell manner of preosteoblast cells on a clinical gelatin sponge as a 3D bone engineering model. *Chang Gung International Medical Research Conference*, Taoyuan, Taiwan. **(Best Poster Paper Award)**
23. **C. Y. Wang**, Zong-Xing Chen, Man-Ping Chang, Jaw-Lin Wang , Po-Liang Lai **2019.07**. Newly designed ratchet growing rod for early onset scoliosis. *25th Congress of the European Society of Biomechanics*, Vienna, Austria, Vienna, Austria. MOST 106-2221-E-182A-003-MY3.
24. **C. Y. Wang**, T. H. Chiang, S.Y. Chien, P. C. Tseng, T. T. Yang, Y. J. Chuang, C. L. Chen, and C. F. Lin. **2012.05** Under Bcl-2 surveillance, cytokines, autophagy-dependently, induce p53-independent CD54 expression. *Immunology 2012 the 99th American Association of Immunologists Annual Meeting*, Boston, America. (Oral Presentation)
25. **C. Y. Wang**, Y. S. Lin, W. C. Su, and C. F. Lin. **2011.12** Annexin A2 facilitates cell cycle by sustaining c-Jun N-terminal kinase-inhibited p53 expression in lung adenocarcinoma. *51th American Society for Cell Biology Annual Meeting (51th)*, Denver, America.
26. **C. Y. Wang**, and C. F. Lin. **2011.02** Annexin A2 facilitates lung tumor cell growth and cisplatin resistance by inhibiting p53-mediated cell cycle arrest. *International Symposium on Cell Signaling and Gene Regulation*, Tainan, Taiwan. **(Best Poster Paper Award)**
27. **C. Y. Wang**, Y. S. Lin, W. C. Su, and C. F. Lin. **2009.12** Glycogen synthase kinase-3 and Omi/HtrA2 induce annexin A2 cleavage followed by cell cycle inhibition and apoptosis. *49th American Society for Cell Biology Annual Meeting* (49th), San

Diego, America.

28. **C. Y. Wang**, Y. S. Lin, W. C. Su, and C. F. Lin. **2008.11** Glycogen synthase kinase-3 and serine protease Omi/HtrA2 regulate annexin A2 cleavage under serum withdrawal. *International Symposium on Cell Signaling and Gene Regulation*, Tainan, Taiwan.
29. Huang, W. C., Y. S. Lin, **C. Y. Wang**, C. C. Tsai, H. C. Tseng, C. L. Chen, P. J. Lu, P. S. Chen, L. Qian, J. S. Hong, and C. F. Lin. **2008.10** Inhibition of glycogen synthase kinase-3 regulates nitric oxide and RANTES production in lipopolysaccharide-activated macrophage through anti-inflammatory IL-10. *4th Congress of the Federation of Immunology Societies of Asia-Oceania (FIMSA 2008)*, Taipei, Taiwan.

**CO-AUTHOR OF CONFERENCE PAPER**

1. G. Y. Hung, **C. Y. Wang**, C. S. Tu, K. C. Feng,I. C. Cheng, H. Y. Hsiao, P. L. Lai, P. Y. Chen. **2024. 10** Tuning Mg/Ca ratios in MgO-CaO-SiO2 bioactive glass to speed up bone cell formation from human adipose-derived stem cells. *International Conference on Smart Devices and Sustainable Energy 2024 (SDSE 2024),* New Taipei city, Taiwan
2. Y. T. Chen, G. Y. Hung, **C. Y. Wang**, C. S. Chen, P. Y. Chen, P. L. Lai. **2024.10** Enhancing the bioactivity of polyetheretherketone (PEEK): surface sulfonation and bioglass-ceramic coating technology. *International Conference on Smart Devices and Sustainable Energy 2024 (SDSE 2024),* New Taipei city, Taiwan
3. Y. J. Wu, **C. Y. Wang**, P. L. Lai, P. Y. Chen. **2024. 10** Accomplishing high surface biologically and coating adhesion in Ti-6Al-4V alloy via anodic oxidation and electrophoretic deposition. *International Conference on Smart Devices and Sustainable Energy 2024 (SDSE 2024)*, New Taipei city, Taiwan
4. G. Y. Hung, **C. Y. Wang**, C. S. Chen, P. L. Lai, K. C. Feng, P. Y. Chen. **2024.07** Accelerated bone regeneration via a composite graft of CaO-MgO-SiO2 glass-ceramics and calcium sulfate ceramics. *Biomaterials International 2024*, Bangkok, Thailand.
5. Y. T. Chen, G. Y. Hung, **C. Y. Wang**, C. S. Chen, P. Y. Chen, P. L. Lai. **2024.07** Improved bioactivity in peek implant via CaO-MgO-SiO2/CaSO4 bioglass-ceramic coating. *Biomaterials International 2024*, Bangkok, Thailand.
6. Y. J. Wu, **C. Y. Wang**, P. L. Lai, P. Y. Chen, C. S. Chen. **2024.07** Enhanced hydrophilicity and bioactivity via surface modification in Ti- 6Al-4V intervertebral fusion cage. *Biomaterials International 2024*, Bangkok, Thailand.. **(Best Poster Paper Award)**
7. Y. T. Chen, H. Y. Hsiao, **C. Y. Wang**, C. S. Tu, K. C. Feng, Haidee Mana-ay, S. Y. Kung, P. Y. Chen, P. L. Lai. **2023.10** Bioglass-ceramic coating and surface modification for improved bioactive performance of 3D-printed Ti-6Al-4V alloy

scaffold. *International Conference on Smart Devices and Sustainable Energy* 2023 *(SDSE 2023)*. Honorable Mention. Taiwan

8. Y. J. Wu, **C. Y. Wang**, K. C. Feng, R. R. Chien, Haidee Mana-ay, S. Y. Kung, K. H. Houg, C. S. Tu, P. Y. Chen, P. L. Lai. **2023.10** Ti-6Al-4V Fusion Cage with Compatible Stiffness, Improved Fatigue Life and Osteogenic Differentiation via Structure and Surface modification. *International Conference on Smart Devices and Sustainable Energy 2023 (SDSE 2023),* New Taipei City, Taiwan
9. Y. T. Chen, P. Y. Chen, **C. Y. Wang**, K. C. Feng, C. S. Tu, P. L. Lai. **2023.07** CaO-MgO-SiO2 bioactive glass-ceramics coated on Ti-6AI-4V with interconnected pores enhance cell bioactivity and osteogenesis. *Biomaterials International 2023*, Sapporo, Japan.
10. Y. J. Wu, **C.Y. Wang**, K.C Feng , R.R. Chien , H. M. Ay , S.Y. Kung , K.H. H , C.S. Tu , P.Y. Chen , P.L. Lai . **2023.07** Ti-6Al-4V intervertebral fusion cage with compatible stiffness, enhanced fatigue life, and osteogenic differentiation. *Biomaterials International 2023*, Sapporo, Japan. **(Best Poster Paper Award)**
11. Y. J Wu, K.C Feng, **C. Y. Wang**, C. S. Tu, Y. L Lin, C. S. Chen, P. L. Lai, Y. T. Huang, and P. Y. Chen. **2021.06** Enhanced mechanical and biological performances of CaO-MgO-SiO2 glass-ceramics via the modulation of glass and ceramic phases. *Biomaterials International 2021*, Kenting, Taiwan.
12. G.Y. Hung, P.Y. Chen, Y.T. Huang, C.S. Chen, P.L. Lai, **C.Y. Wang**, Y.L. Lin, C.S. Tu and K.C. Feng. **2021.06** Enhancing mechanical strength and in vitro bioactivity of CaSiO3 glass-ceramics added with P2O5 nucleation agent. *Biomaterials International 2021*, Kenting, Taiwan.