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Curriculum Vitae

Guojun Chen, Ph.D.

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POSITIONS AND EMPLOYMENT

- **Assistant Professor** **2021-**
Department of Biomedical Engineering
Faculty of Medicine and Health Sciences
McGill University
- **Member** **2021-**
Rosalind & Morris Goodman Cancer Institute
Faculty of Medicine and Health Sciences
McGill University

EDUCATION AND TRAINING

- **University of California, Los Angeles (UCLA), USA** **2018-2020**
Postdoctoral Fellow, Advisor: Zhen Gu
Department of Bioengineering, School of Engineering
- **University of Wisconsin-Madison, USA** **2012-2017**
Ph.D., Materials Science, Advisor: Shaoqin Sarah Gong
Department of Materials Science, College of Engineering
- **Nankai University, China** **2008-2012**
B.S., Chemistry, Advisor: Wangqing Zhang
Department of Chemistry, College of Chemistry

AWARDS AND HONORS

- FRQS Career Award (Junior 1), 2022-2026
- Young Investigator award, Chinese Association for Biomaterials (CAB), 2022
- Research Assistant Scholarship, University of Wisconsin-Madison, 2012–2017
- Louis C. Bernhardt, MD, Best Translational-Clinical Poster – Student Award, UW–Madison, 2015
- The Second Prize of Excellent Undergraduate Scholarship of Nankai University, 2010–2011
- The Third Prize of Excellent Undergraduate Scholarship of Nankai University, 2009
- “Three-good” Student Award of Nankai University, 2010–2012
- Xu A'Qiong Scholarship, Putian, China, 2008

PUBLICATIONS

First-authored papers (#: equal contribution; *: corresponding author):

Google scholar: <https://scholar.google.com/citations?user=eJJgC7oAAAAJ&hl=en>

74. Xiaona Cao, **Guojun Chen***

"Advances in microneedles for non-transdermal applications", *Expert Opinion on Drug Delivery*, 19(9), 1081 (2022).

73. Tianxu Fang, Xiaona Cao, Mysha Ibnat, **Guojun Chen***
"Stimuli-responsive nanoformulations for CRISPR-Cas9 genome editing", *Journal of Nanobiotechnology*, 20, 354 (2022)
72. Hanwen Wang, Jiahuan He, **Guojun Chen***
"Nanotracker" for superior early disease diagnosis", *MedComm-Biomaterials and Applications*, 1, e12 (2022)
71. Pooyan Makvandi*, **Guojun Chen***, Virgilio Mattoli*.
"Nano-biomedicine: Role of nanomaterials in the biomedical sector", *Clinical and Translational Discovery*. 2(1): e32 (2022)
70. Han Zhang, Jiafei Zhu, Tianxu Fang, Meng Li*, **Guojun Chen***, Qian Chen*
"Supramolecular biomaterials for enhanced cancer immunotherapy", *Journal of Materials and Chemistry B*, online (2022)
69. Zhitong Chen#, **Guojun Chen#**, Richard Obenchain, Rui Zhang, Fan Bai, Tianxu Fang, Hanwen Wang, Yingjie Lu, Richard E. Wirz*, Zhen Gu*,
"Cold atmospheric plasma delivery for biomedical applications", *Materials Today*, in press. (2022)
68. **Guojun Chen#**, Zhitong Chen#, Zejun Wang, Richard Obenchain, Di Wen, Hongjun Li, Richard E. Wirz*, and Zhen Gu*
"Portable air-fed cold atmospheric plasma device for postsurgical cancer treatment", *Science Advances*, 7, eabg5686 (2021) (*online image featured*).
67. Pooyan Makvandi#, Aziz Maleki#, Majid Shabani#, Aaron RJ Hutton, Melissa Kirkby, Rezvan Jamaledin, Tianxu Fang, Jiahuan He, Jesse Lee, Barbara Mazzolai, Ryan F Donnelly, Franklin R Tay, **Guojun Chen***, Virgilio Mattoli*,
"Bioinspired microneedle patches: biomimetic designs, fabrication, and biomedical applications", *Matter*, 5, 390-429 (2021)
66. Zhaowei Chen, Hongjun Li, Yijie Bian, Zejun Wang, **Guojun Chen**, Xudong Zhang, Yimin Miao, Di Wen, Jinqiang Wang, Gang Wan, Yi Zeng, Peter Abdou, Jun Fang, Song Li, Cheng-Jun Sun, and Zhen Gu
"Bioorthogonal catalytic patch", *Nature Nanotechnology*, 16, 933 (2021).
65. Fengqin Luo#, Guojun Chen#, Wei Xu, Daojia Zhou, Jiaxian Li, Yongcong Huang, Run Lin, Zhen Gu and Jinzhi Du
"Microneedle-array patch with pH-sensitive formulation for glucose-responsive insulin delivery", *Nano Research*. 14, 2689-2696 (2021).
64. Hongjun Li, Zejun Wang, Edikan Archibong, Qing Wu, **Guojun Chen**, Quanyin Hu, Tianyuan Ci, Zhaowei Chen, Jinqiang Wang, Di Wen, Hongwei Du, Jie Jiang, Jie Sun, Xingcai Zhang, Gianpietro Dotti, Zhen Gu
"Scattered seeding of CAR T cells in solid tumors augments anticancer efficacy", *National Science Review*, nwab172 (2021).
63. Yan Li, Bolei Cai, Zhaoyichun Zhang, Guanlin Qu, Lu Chen, **Guojun Chen**, Tingxizi Liang, Chi Yang, Ling Fand, and Zhiyuan Zhang
"Salicylic acid-based nanomedicine with self-immunomodulatory activity facilitates microRNA therapy for metabolic skeletal disorders", *Acta Biomaterialia*, 130, 435 (2021).
62. Pooyan Makvandi1*#, Rezvan Jamaledin#, **Guojun Chen#**, Zahra Baghbantaraghdari#, Ehsan Nazarzadeh Zare, Concetta di Natale, Valentina Onesto, Raffaele Vecchione, Jesse Lee, Franklin Tay, Paolo Netti, Virgilio Mattoli, Ana Jaklenec, Zhen Gu, and Robert Langer
"Stimuli-responsive transdermal microneedle patches for drug delivery", *Materials Today*, 47, 206 (2021). (Inner Cover)
61. Cong-Fei Xu#, **Guojun Chen#**, Ying-Li Luo, Yue Zhang, Gui Zhao, Zi-Dong Lu, Anna Czarna, Zhen Gu*, and Jun Wang*
"Rational Designs of In Vivo CRISPR-Cas Delivery Systems", *Advanced Drug Delivery Reviews*, 168, 3-29 (2021).

60. Tingxizi Liang, Di Wen, **Guojun Chen**, Amanda Chan, Zhaowei Chen, Hongjun Li, Zejun Wang, Xiao Han, Liping Jiang*, Jun-Jie Zhu* and Zhen Gu*
"Adipocyte-Derived Anticancer Lipid Droplet", **Advanced Materials**, 2100629 (2021).
59. Hongjun Li, Zejun Wang, Zhaowei Chen, Tianyuan Ci, **Guojun Chen**, Di Wen, Ruoxin Li, Jinqiang Wang, Huan Meng, Richard Bell, Zhifeng Gu, Gianpietro Dotti, and Zhen Gu*
"Disrupting tumour vasculature and recruitment of aPDL1-loaded platelets control tumour metastasis", **Nature Communications**, 12, 2773 (2021).
58. Jinqiang Wang, Zejun Wang, **Guojun Chen**, Yanfang Wang, Tianyuan Ci, Hongjun Li, Xiangsheng Liu, Daojia Zhou, Anna Kahkoska, Zhuxian Zhou, Huan Meng, John Buse, Zhen Gu*
"Injectable Biodegradable Polymeric Complex for Glucose-Responsive Insulin Delivery", **ACS Nano**, 15, 3, 4294-4304 (2021).
57. **Guojun Chen**#, Zhitong Chen#, Di Wen, Zejun Wang, Hongjun Li, Yi Zeng, Gianpietro Dotti, Richard E. Wirz*, and Zhen Gu*
"Transdermal Cold Atmospheric Plasma-Mediated Immune Checkpoint Blockade Therapy", **Proceedings of the National Academy of Sciences U.S.A. (PNAS)**, 117, 3687-3692 (2020).
"Highly Cited Paper" (top 1% of the academic field of Clinical Medicine) by Web of Science
Highlights: Physics World; UCLA Health; UCLA Newsroom; Medical Express
56. **Guojun Chen** and Zhen Gu
"A prophylactic and a therapeutic against AML", **Nature Biomedical Engineering**, 4, 4-5 (2020).
55. Jicheng Yu, Jinqiang Wang, Yuqi Zhang, **Guojun Chen**, Weiwei Mao, Yanqi Ye, Anna R Kahkoska, John B Buse, Robert Langer, and Zhen Gu*
"Glucose-responsive insulin patch for the regulation of blood glucose in mice and minipigs", **Nature Biomedical Engineering**, 4, 499-506 (2020).
54. Yi Zeng, Jinqiang Wang, Zejun Wang, **Guojun Chen**, Jicheng Yu, Sen Li, Qiwei Li, Hongjun Li, Di Wen, Zhongze Gu, Zhen Gu
"Colloidal crystal microneedle patch for glucose monitoring", **Nano Today**, 35, 100984 (2020).
53. Tianyuan Ci, Hongjun Li, **Guojun Chen**, Zejun Wang, Jinqiang Wang, Peter Abdou, Yiming Tu, Gianpietro Dotti, Zhen Gu
"Cryo-shocked cancer cells for targeted drug delivery and vaccination", **Science Advances**, 6, eabc3013 (2020).
52. Zejun Wang, Jinqiang Wang, Hongjun Li, Jicheng Yu, **Guojun Chen**, Anna R Kahkoska, Valerie Wu, Yi Zeng, Di Wen, Jayson R Miedema, John B Buse, Zhen Gu
"Dual self-regulated delivery of insulin and glucagon by a hybrid patch", **Proceedings of the National Academy of Sciences (PNAS)**, 117, 29512-29517 (2020).
51. **Guojun Chen**#, Amr A. Abdeen#, Yuyuan Wang#, Pawan K. Shahi, Samantha Robertson, Ruosen Xie, Masatoshi Suzuki, Bikash R. Pattnaik, Krishanu Saha*, and Shaoqin Gong*
"A Biodegradable Nanocapsule Delivers A Cas9 Ribonucleoprotein Complex for In Vivo Genome Editing", **Nature Nanotechnology** 14, 974-980 (2020).
Highlights: The NIH director, Dr. Francis S. Collins's blog; ScienceBlog.com; Medical Health News; Physics World; BioInsights; The Medical News; Newswise; Nanowerk; Longroom; UW News
50. Rezvan Jamaledin, Cynthia KY Yiu, Ehsan N Zare, Li-na Niu, Raffaele Vecchione, **Guojun Chen**, Zhen Gu, Franklin R Tay, and Pooyan Makvandi
"Advances in antimicrobial microneedle patches for combating infections", **Advanced Materials**, 2002129 (2020).
49. Guang Yang*, **Guojun Chen**, and Zhen Gu*
"Transdermal Drug Delivery for Hair Regrowth", **Molecular Pharmaceutics**, 18, 2, 483-490 (2020).
48. Qian Chen#*, **Guojun Chen**#, Jiawen Chen, Jiawen Chen, Jingjing Shen, Xudong Zhang, Jinqiang Wang, Amanda Chan, Zhen Gu*
"Bioresponsive Protein Complex of aPD1 and aCD47 Antibodies for Enhanced Immunotherapy", **Nano Letters**, 19, 4879-4889 (2019).

47. Jiawei Li#, **Guojun Chen**#, Xingquan Xu, Peter Abdou, Qing Jiang, Dongquan Shi*, and Zhen Gu*
"Advances of Injectable Hydrogel-based Scaffolds for Cartilage Regeneration", **Regenerative Biomaterials**, 6, 129-140 (2019). (Cover feature)
46. **Guojun Chen**, Jicheng Yu, and Zhen Gu*
"Glucose-Responsive Microneedle Patches for Diabetes Treatment", **Journal of Diabetes Science and Technology**, 13, 41-48 (2019). (Invited review)
45. Qian Chen, Chao Wang, Xudong Zhang, **Guojun Chen**, Quanyin Hu, Hongjun Li, Jinqiang Wang, Di Wen, Yuqi Zhang, Yifei Lu, Guang Yang, Chen Jiang, Jun Wang, Gianpietro Dotti, and Zhen Gu
"In Situ Sprayed Bioresponsive Immunotherapeutic Gel for Post-Surgical Cancer Treatment", **Nature Nanotechnology**, 14, 89-97 (2019).
44. Di Wen, Jinqiang Wang, George Van Den Driessche, Qian Chen, Yuqi Zhang, **Guojun Chen**, Hongjun Li, Jennifer Soto, Ming Liu, Masao Ohashi, Zejun Wang, Peter Abdou, Quanyin Hu, Gianpietro Dotti, Song Li, Denis Fourches, and Zhen Gu
"Adipocytes as Anticancer Drug Delivery Depot", **Matter**, 1, 1203-1214 (2019).
43. Da Huo, Jianfeng Zhu, **Guojun Chen**, Qian Chen, Chao Zhang, Xingyu Luo, Wei Jiang, Xiqun Jiang, Zhen Gu*, Yong Hu*
"Eradication of unresectable liver metastasis through induction of tumour specific energy depletion", **Nature Communications**, 10, 3051 (2019).
42. Xiao Han, Shufang Shen, Qin Fan, **Guojun Chen**, Edikan Archibong, Gianpietro Dotti, Zhuang Liu, Zhen Gu*, and Chao Wang*
"Red Blood Cell Derived Nanoerythroosome for Antigen Delivery with Enhanced Cancer Immunotherapy", **Science Advances**, 5, eaaw6870 (2019).
41. Jinqiang Wang, Jicheng Yu, Yuqi Zhang, Xudong Zhang, Anna R Kahkoska, **Guojun Chen**, Zejun Wang, Wujin Sun, Lulu Cai, Zhaowei Chen, Chenggen Qian, Qundong Shen, Ali Khademhosseini, John B Buse, and Zhen Gu*
"Charge-Switchable Polymeric Complex for Glucose-Responsive Insulin Delivery", **Science Advances**, 5, eaaw4357 (2019).
40. Qian Chen, Quanyin Hu, Elena Dukhovlina, **Guojun Chen**, Sarah Ahn, Chao Wang, Edikan A Ogunnaike, Frances S Ligler, Gianpietro Dotti, and Zhen Gu*
"Photothermal Therapy Promotes Tumor Infiltration and Antitumor Activity of CAR T Cells", **Advanced Materials**, 31, e1900192 (2019).
39. Huitong Ruan, Quanyin Hu, Di Wen, Qian Chen, **Guojun Chen**, Yifei Lu, Jinqiang Wang, Hao Cheng, Weiyue Lu, and Zhen Gu*
"A Dual-Bioresponsive Drug Delivery Depot for Combination of Epigenetic Modulation and Immune Checkpoint Blockade", **Advanced Materials**, 31, e1806957 (2019).
38. Guang Yang, Qian Chen, Di Wen, Zhaowei Chen, Jinqiang Wang, **Guojun Chen**, Zejun Wang, Xudong Zhang, Yuqi Zhang, Quanyin Hu, Liang Zhang, and Zhen Gu*
"A Therapeutic Microneedle Patch Made from Hair-Derived Keratin for Promoting Hair Regrowth", **ACS Nano**, 13, 4354-4360 (2019).
37. Rajesh Paul, Amanda C Saville, Jeana C Hansel, Yanqi Ye, Carmin Ball, Alyssa Williams, Xinyuan Chang, **Guojun Chen**, Zhen Gu, Jean B Ristaino, and Qingshan Wei
"Extraction of Plant DNA by Microneedle Patch for Rapid Detection of Plant Diseases", **ACS Nano**, 13, 6540-6549 (2019).
36. Lin-Lin Bu, Lang Rao, Guang-Tao Yu, Lei Chen, Wei-Wei Deng, Jian-Feng Liu, Hao Wu, Qian-Fang Meng, Shi-Shang Guo, Xing-Zhong Zhao, Wen-Feng Zhang, **Guojun Chen**, Zhen Gu, Wei Liu, and Zhi-Jun Sun
"Cancer Stem Cell-Platelet Hybrid Membrane-Coated Magnetic Nanoparticles for Enhanced Photothermal Therapy of Head and Neck Squamous Cell Carcinoma", **Advanced Functional Materials**, 29, 1807733 (2019).
35. Shuangjiang Yu, Shu Wei, Liang Liu, Desheng Qi, Jiayu Wang, **Guojun Chen**, Wanying He, Chaoliang He, Xuesi Chen, Zhen Gu

- "Enhanced Local Cancer Therapy by CA4P and CDDP Co-Loaded Polypeptide Gel Depot", *Biomaterials Science*, 7, 860-866 (2019).
34. Di Wen, **Guojun Chen**, Qian Chen, Peter Y Li, Hao Cheng, and Zhen Gu
"Engineering Protein Delivery Depots for Cancer Immunotherapy", *Bioconjugate Chemistry*, 30, 515-524 (2019).
33. **Guojun Chen**, Yuyuan Wang, Ruosen Xie, and Shaoqin Gong*
"A Review on Core-Shell Structured Unimolecular Nanoparticles for Biomedical Applications", *Advanced Drug Delivery Reviews*, 130, 58 (2018).
32. Bowen Wang#, **Guojun Chen**#, Go Urabe, Ruosen Xie, Yuyuan Wang, Xudong Shi, Lian-Wang Guo, Shaoqin Gong*, K Craig Kent*
"A Paradigm of Endothelium-Protective and Stent-Free Anti-Restenotic Therapy Using Biomimetic Nanoclusters", *Biomaterials*, 178, 293-301 (2018).
31. **Guojun Chen**#, Ben Ma#, Yuyuan Wang, and Shaoqin Gong*
"A Universal GSH-Responsive Nanoplatfor for the Delivery of DNA, mRNA, and Cas9/sgRNA Ribonucleoprotein", *ACS Applied Materials & Interfaces*, 10, 18515-18523 (2018).
30. Junjie Yan, Yue Lu, **Guojun Chen**, Min Yang, and Zhen Gu
"Advances in Liquid Metals for Biomedical Applications", *Chemical Society Reviews*, 47, 2518-2533 (2018).
29. Yei Hwan Jung, M Joseph Phillips, Juhwan Lee, Ruosen Xie, Allison L Ludwig, **Guojun Chen**, Qifeng Zheng, Tong June Kim, Huilong Zhang, Patrick Barney, Jee Min, Katherine Barlow, Shaoqin Gong, David M Gamm, and Zhenqiang Ma
"Three-Dimensional Micro-Structured Scaffolds to Support Photoreceptor Polarization and Maturation", *Advanced Materials*, 30, e1803550 (2018).
28. Qian Chen, Chao Wang, **Guojun Chen**, Quanyin Hu, and Zhen Gu
"Delivery Strategy for Immune Checkpoint Blockade", *Advanced Healthcare Materials*, 7, e1800424 (2018).
27. Yuqi Zhang, Jicheng Yu, Di Wen, **Guojun Chen**, and Zhen Gu
"The Potential of A Microneedle Patch for Reducing Obesity", *Expert Opinion On Drug Delivery*, 15, 431-433 (2018).
26. Yuyuan Wang, Ben Ma, Amr A Abdeen, **Guojun Chen**, Ruosen Xie, Krishanu Saha, and Shaoqin Gong
"Versatile Redox-Responsive Polyplexes for the Delivery of Plasmid DNA, Messenger RNA, and CRISPR-Cas9 Genome-Editing Machinery", *ACS Applied Materials & Interfaces*, 10, 31915-31927 (2018).
25. Lulu Cai, Zhipeng Gu, Jian Zhong, Di Wen, **Guojun Chen**, Lin He, Jun Wu, and Zhen Gu
"Advances in Glycosylation-Mediated Cancer-Targeted Drug Delivery", *Drug Discovery Today*, 23, 1126 (2018).
24. **Guojun Chen**#, Ben Ma#, Yuyuan Wang, Ruosen Xie, Chun Li, Kefeng Dou*, and Shaoqin Gong*
"CuS-Based Theranostic Micelles for NIR-Controlled Combination Chemotherapy and Photothermal Therapy, and Photoacoustic Imaging", *ACS Applied Materials & Interfaces*, 9, 41700-41711 (2017).
23. **Guojun Chen**#, Renata Jaskula-Sztul#, Corinne R Esquibel, Irene Lou, Qifeng Zheng, Ajitha Dammalapati, April Harrison, Kevin W Eliceiri, Weiping Tang, Herbert Chen*, and Shaoqin Gong*
"Neuroendocrine Tumor-Targeted Upconversion-Nanoparticle-Based Micelles for Simultaneous NIR-Controlled Combination Chemotherapy and Photodynamic Therapy, and Fluorescence Imaging", *Advanced Functional Materials*, 27, 1604671 (2017).
22. **Guojun Chen**, Yuyuan Wang, Ruosen Xie, and Shaoqin Gong*
"Tumor-Targeted pH/Redox Dual-Sensitive Unimolecular Nanoparticles for Efficient siRNA Delivery", *Journal of Controlled Release*, 259, 105-144 (2017).
21. **Guojun Chen**#, Ben Ma#, Ruosen Xie, Yuyuan Wang, Kefeng Dou*, and Shaoqin Gong*
"NIR-induced Spatiotemporally Controlled Gene Silencing in Cells", *Journal of Controlled Release*, 282, 148-155 (2017).

20. Lei Zhao#, **Guojun Chen**#, Jun Li, Yingmei Fu, Timur A Mavlyutov, Annie Yao, Robert W Nickells, Shaoqin Gong*, and Lian-Wang Guo*
"An Intraocular Drug Delivery System Using Targeted Nanocarriers Attenuates Retinal Ganglion Cell Degeneration", *Journal of Controlled Release*, 247, 153-166 (2017).
19. **Guojun Chen**#, Xudong Shi#, Bowen Wang, Ruosen Xie, Lian-Wang Guo, Shaoqin Gong*, K Craig Kent*
"A Unimolecular Micelle-Based Hybrid System for Perivascular Drug Delivery Produces Long-Term Efficacy for Neointima Attenuation in Rats", *Biomacromolecules*, 18, 2205-2213 (2017).
18. Yuyuan Wang, Yidan Wang, **Guojun Chen**, Yitong Li, Wei Xu, and Shaoqin Gong
"Quantum Dot-Based Theranostic Micelles Conjugated with an Anti-EGFR Nanobody for Triple-Negative Breast Cancer Therapy", *ACS Applied Materials & Interfaces*, 9, 30297-30305 (2017).
17. Yuyuan Wang, Liwei Wang, **Guojun Chen**, and Shaoqin Gong
"Carboplatin-Complexed and cRGD-Conjugated Unimolecular Nanoparticles for Targeted Ovarian Cancer Therapy", *Macromolecular Bioscience*, 17, 1600292 (2017).
16. Haoyang Mi, Xin Jing, Brett N Napiwocki, Breanna S Hagerty, **Guojun Chen**, and Lih-Sheng Turng
"Biocompatible, Degradable Thermoplastic Polyurethane Based on Polycaprolactone-Block-Polytetrahydrofuran-Block-Polycaprolactone Copolymer for Soft Tissue Engineering", *Journal of Materials Chemistry B*, 5, 4137-4151 (2017).
15. Haoyang Mi, Xin Jing, Breanna S Hagerty, **Guojun Chen**, An Huang, and Lih-Sheng Turng
"Post-Crosslinkable Biodegradable Thermoplastic Polyurethanes: Synthesis, and Thermal, Mechanical, and Degradation Properties", *Materials & Design*, 127, 106-114 (2017).
14. Yuyuan Wang, Yidan Wang, **Guojun Chen**, Yitong Li, Wei Xu, and Shaoqin Gong
"Quantum Dot-Based Theranostic Micelles Conjugated with an Anti-EGFR Nanobody for Triple-Negative Breast Cancer Therapy", *ACS Applied Materials & Interfaces*, 9, 30297-30305 (2017).
13. Yuyuan Wang, Liwei Wang, **Guojun Chen**, and Shaoqin Gong
"Carboplatin-Complexed and cRGD-Conjugated Unimolecular Nanoparticles for Targeted Ovarian Cancer Therapy", *Macromolecular Bioscience*, 17, 1600292 (2017).
12. Renata Jaskula-Sztul#, **Guojun Chen**#, Ajitha Dammalapati, April Harrison, Weiping Tang, Shaoqin Gong*, and Herbert Chen*
"AB3-Loaded and Tumor-Targeted Unimolecular Micelles for Medullary Thyroid Cancer Treatment", *Journal of Materials Chemistry B*, 5, 151-159 (2017).
11. Fabao Liu, Fengfei Ma, Yuyuan Wang, Ling Hao, Hao Zeng, Chenxi Jia, Yidan Wang, Peng Liu, Irene M Ong, Baobin Li, **Guojun Chen**, Jiaoyang Jiang, Shaoqin Gong, Lingjun Li, and Wei Xu
"PKM2 Methylation by CARM1 Activates Aerobic Glycolysis to Promote Tumorigenesis", *Nature Cell Biology*, 19, 1358-1138 (2017).
10. **Guojun Chen**#, Renata Jaskula-Sztul#, April Harrison, Ajitha Dammalapati, Wenjin Xu, Yiqiang Cheng, Herbert Chen*, and Shaoqin Gong*
"KE108-Conjugated Unimolecular Micelles Loaded with a Novel HDAC Inhibitor Thailandepsin-A for Targeted Neuroendocrine Cancer Therapy", *Biomaterials*, 97, 22-33 (2017).
9. Ashley M Brinkman#, **Guojun Chen**#, Yidan Wang, Curtis J Hedman, Nathan M Sherer, Thomas C Havighurst, Shaoqin Gong*, and Wei Xu*
"Aminoflavone-Loaded EGFR-Targeted Unimolecular Micelle Nanoparticles Exhibit Anti-Cancer Effects in Triple Negative Breast Cancer", *Biomaterials*, 101, 20-31 (2016).
8. Renata Jaskula-Sztul, Wenjin Xu, **Guojun Chen**, April Harrison, Ajitha Dammalapati, Renu Nair, Yiqiang Cheng, and Shaoqin Gong, Herbert Chen
"Thailandepsin A-loaded and Octreotide-Functionalized Unimolecular Micelles for Targeted Neuroendocrine Cancer Therapy", *Biomaterials*, 91, 1-10 (2016).
7. Mirnal A Chaudhary, Lian-Wang Guo, Xudong Shi, **Guojun Chen**, Shaoqin Gong, Bo Liu, and K Craig Kent

- "Periadventitial Drug Delivery for the Prevention of Intimal Hyperplasia Following Open Surgery", **Journal of Controlled Release**, 233, 174-180 (2016).
6. **Guojun Chen**, Liwei Wang, Travis Cordie, Corinne Vokoun, Kevin W Eliceiri, and Shaoqin Gong* "Multi-functional self-fluorescent unimolecular micelles for tumor-targeted drug delivery and bioimaging", **Biomaterials**, 47, 41-50 (2015).
 5. Xudong Shi#, **Guojun Chen**#, Liangwang Guo, Yi Si, Men Zhu, Srikanth Pilla, Bo Liu, Shaoqin Gong, Craig Kent "Periadventitial Application of Rapamycin-Loaded Nanoparticles Produces Sustained Inhibition of Vascular Restenosis", **PLoS One**, 9, e89227 (2014).
 4. Jintang Guo, J., Hong, H., **Chen, G.**, Shi, S., Nayak, T.R., Theuer, C.P., Barnhart, T.E., Cai, W., and Gong S. "Theranostic Unimolecular Micelles Based on Brush-Shaped Amphiphilic Block Copolymers for Tumor-Targeted Drug Delivery and Positron Emission Tomography Imaging", **ACS Applied Materials & Interfaces**, 6, 21769 (2014).
 3. Gajbhiye, V., Escalante L., **Chen, G.**, Laperle, A., Zheng, Q., Steyer, B., Gong, S., and Saha. K. "Drug-loaded nanoparticles induce gene expression in human pluripotent stem cell derivatives", **Nanoscale**, 6, 521 (2014).
 2. Guo, J., Hong, H., **Chen, G.**, Shi, S., Zheng, Q., Zhang Y., Theuer, C.P., Barnhart, T.E., Cai, W., and Gong, S., "Image-Guided and Tumor-Targeted Drug Delivery with Radiolabeled Unimolecular Micelles", **Biomaterials**, 34, 8323 (2013).
 1. Xu, J., **Chen, G.**, Yan, R., Wang, D., Zhang, M., Zhang, W., and Sun, P. "One-Stage Synthesis of Cage-like Porous Polymeric Microspheres and Application as Catalyst Scaffold of Pd Nanoparticles", **Macromolecules**, 44, 3730 (2012).

PATENTS:

7. Zhen Gu, Jicheng Yu, and **Guojun Chen**, "Microneedle-Array Patches with Glucose-Responsive Matrix For Closed-Loop Insulin Delivery", PCT/US2019/048063, 2019 (Accepted into the U.S. Food and Drug Administration's "Emerging Technology Program")
6. Shaoqin Gong, Kris Saha, **Guojun Chen**, Amr A. Abdeen, Yuyuan Wang, and Ruosen Xie, "Nanocapsule Delivery System for Ribonucleoproteins", UA Patent, 16/113,963, 2021 (Granted)
5. Shaoqin Gong and **Guojun Chen**, "Unimolecular Nanoparticles for Efficient Delivery of Therapeutic RNA", US Patent 15/819,424, 2020 (Granted)
4. Craig C. Kent, Shaoqin Gong, Xudong Shi, **Guojun Chen**, and Lianwang Guo, "Perivascular Drug Delivery System", US Patent 10,668,017, 2020 (Granted)
3. Craig K. Kent, Shaoqin Gong, Lianwang Guo, **Guojun Chen**, and Bowen Wang, "Biomimetic Vesicles And Uses Thereof", PCT/US2019/033861, 2019 (Pending).
2. Richard E. Wirz, Zhen Gu, Zhitong Chen, and **Guojun Chen**, "Methods For Treating Cancers and Tumors with Cold Atmospheric Plasma Delivery", U.S. Serial No. 63/197,258, 2021 (Pending)
1. Zhen Gu, Richard E. Wirz, **Guojun Chen**, and Zhitong Chen, "Transdermal Microneedle-Mediated Immune Checkpoint Blockade Therapy", PCT/ US20/064361, 2020 (Pending).

SELECTED PRESENTATIONS AND INVITED TALKS

1. **Chen, G.** "Engineering Nanoformulations and Microdevices for Drug Delivery", Canada Chapter Of Chinese Biopharmaceutical Association (CBA-Canada), Montreal, Canada, 2022.
2. **Chen, G.**, "Nanoformulations for Gene Delivery", Seminar, Cystic Fibrosis Centre @ The Hospital for Sick Children, University of Toronto, 2022.
3. **Chen, G.** "Engineering Nanoformulations and Microdevices for Drug Delivery", The Martlet Society, 2021.

4. **Chen, G.** “Engineering Nanoformulations and Microdevices for Drug Delivery”, Seminar in the Department of Pharmacology & Therapeutics, McGill University, Canada, 2021.
5. **Chen, G.**, “Transdermal Cold Atmospheric Plasma-Mediated Immune Checkpoint Blockade Therapy”, TRIC21 (Therapeutic ROS and Immunity in Cancer) international conference meeting, 2021.
6. **Chen, G.**, “Engineering Nanoformulations and Microdevices for Drug Delivery”, BBME seminar, McGill University, 2021.
7. **Chen, G.**, “Introduction to Nanomedicine”, BME, McGill University, 2020.
8. **Chen, G.**, “Engineering Nanoformulations and Microdevices for Drug Delivery”, Providence Portland Medical Center, USA, 2020.
9. **Chen, G.**, “Transdermal Cold Atmospheric Plasma-Mediated Immune Checkpoint Blockade Therapy”, 2020 CRS Annual Meeting & Exposition, USA, 2020.
10. **Chen, G.**, “Platelet-Delivered Immunotherapies. New Horizons in Immunotherapy for Head and Neck Cancer, USA, 2019
11. **Chen, G.**, “Synthetic β -cells for Fusion-Mediated Dynamic Insulin Secretion”, Society For Biomaterials, USA, 2018.
12. **Chen, G.**, Ma, B., Wang, Y., Xie, R., Li, C., Dou, K., and Gong, S., “CuS-Based Theranostic Micelles for NIR-Controlled Combination Chemotherapy and Photothermal Therapy, and Photoacoustic Imaging”, Society For Biomaterials 2018 Annual Meeting and Exposition, Atlanta, GA, April 11-14, 2018.
13. **Chen, G.**, “Stimuli-Responsive Nanocarriers for Gene Therapy”, Seminar for Stem Cell & Regenerative Medicine Center, University of Wisconsin–Madison, Madison, WI, USA. Oct. 24, 2017
14. **Chen, G.**, Brinkman, A., Wang, Y., Hedman, C., Havighurst, T., Sherer, M., Xu, W., Gong, S., “Multifunctional Unimolecular Micelles Loaded With the Anti-Cancer Drug Aminoflavone for Triple-Negative Breast Cancer Therapy,” Biomedical Engineering Society 2016 Annual Meeting, Minneapolis, Minnesota, Oct. 5-8, 2016.
15. **Chen, G.**, Shi, X., Guo, L., Kent, K. C., and Gong, S., “Periadventitial Application of Rapamycin-Loaded Nanoparticles Produces Sustained Inhibition of Vascular Restenosis”, BMES 2014 Annual Meeting in San Antonio, Texas, Oct. 22-25, 2014.
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17. **Chen, G.**, Jaskula–Sztul, R., Harrison, A., Vokoun, C., Wang, L., Eliceiri, W., Chen, H., Gong, S., “Tumor-Targeting Upconversion Nanoparticle-Based Unimolecular Micelles for Simultaneous Chemotherapy, Photodynamic Therapy, and Fluorescence Imaging for Neuroendocrine Cancer Therapy”, Biomedical Engineering Society 2016 Annual Meeting, Minneapolis, Minnesota, Oct. 5-8, 2016.
18. **Chen, G.**, Jaskula–Sztul, R., Harrison, A., Dammalapati, A., Xu, W., Cheng, Y., Chen, H., Gong, S., “KE108-Conjugated Unimolecular Micelles Loaded with a Novel HDAC Inhibitor Thailandepsin-A for Targeted Neuroendocrine Cancer Therapy”, Biomedical Engineering Society 2016 Annual Meeting, Minneapolis, Minnesota, Oct. 5-8, 2016.
19. **Chen, G.**, Gong, S., “pH/Redox Dual-Responsive Unimolecular Nanoparticles for Efficient Targeted Delivery of siRNA”, 2016 Materials Research Society Fall Meeting, Boston, Massachusetts, Nov. 27-Dec. 2, 2016.

FUNDING

- **CIHR - Project Grant (PI)**
2022/10-2027/09
- **NOVA-FRQNT-NSERC Grant (PI)**
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2022/07 – 2026/06
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- **Canadian Cancer Society - Challenge Grant (PI)**
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- **NSERC – Research Tools and Instruments Grants, co-PI (PI: Dr. Maryam Tabrizian)**
2021/07-2022/07

PROFESSIONAL ACTIVITIES

Editorship:

- Editorial Board member for ***Biomaterials*** (IF: 15.3) 2021-present
- Associate Editor for ***Frontiers in Bioengineering and Biotechnology*** (IF: 6.1) 2022-present
- Guest Editor for the Special Issue entitled "Nano-Biomedicine" in ***Clinical and Translational Discovery*** (CTD) in Wiley

Academic Membership

- McGill Regenerative Medicine (MRM) Network
- FRQS-Cancer Research Network (RRCancer)
- Biomedical Engineering Society (BMES)
- Controlled Release Society (CRS)
- Society for Biomaterials (SFB)

Journal Paper Reviewer

- Science Advances
- Matter
- ACS Nano
- Advanced Drug Delivery Reviews
- Biomaterials
- Accounts of Materials Research
- ACS Applied Materials & Interfaces
- Nano Research
- Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology
- Biomaterials Science
- Journal of Nanobiotechnology
- Journal of Advanced Research
- New Journal of Chemistry

- Colloids and Surfaces B: Biointerfaces
- Medicine in Drug Discovery
- Drug Delivery and Translational Research
- Pharmaceutical Research
- Plasma Processes and Polymers
- Exploration
- Aggregates

Peer Assessment Committee:

- Associate member of the College of Reviews – CIHR, 2022-present
- CIHR Fellowships - Post-PhD Awards Committee member, CIHR, 2021-present
- Goodman Cancer Centre Internal Award Committee member, 2021-present
- MRM McGill Engineering Doctoral Award Committee member, 2021-present
- CIHR Reviewer in Training Program (Mentee) – Fall 2021 Project Grant competition