Junyang Qi

PhD

UCSF Department of Radiology and Biomedical Imaging, 600 16th St. Genentech Hall Box 2280, San Francisco, CA 94143
415-916-7499 junyang.qi@ucsf.edu https://linkedin.com/in/junyangqi https://junyangqi.com

Education

Sun Yat-sen University *Guangzhou, China*
PhD, Medicinal Chemistry *2017 - 2021*
- Advisors: Prof. Wenbin Deng

Wuhan Institute of Technology *Wuhan, China*
BS & MSc, Pharmaceutical Chemistry *2010 - 2017*
- Advisor: Prof. Heng Zhang & Prof. Yihong Yang

Professional Experience

2024-Pres. **Postdoctoral Scholar**, Department of Radiology and Biomedical Imaging, UCSF; Advisor: Prof. Michael Evans
2021-2023 **Postdoctoral Fellow**, School of Pharmaceutical Sciences, Sun Yat-sen University

Research Interests

Cancer Phototherapy; Radioligand Therapy; Translational Oncology; Cancer Theranostics; Small-Molecule Probes

Skills & Expertise

Basic Chemistry: Organic Synthesis; Chemical Analysis; Radiochemistry; Peptide Synthesis ...

Molecular Biology: Cell Culture; SDS-PAGE; Western Blot; Cell Imaging; Transfection; Flow Cytometry ...

in vivo Oncology: Cancer Model Establishment; in vivo Chemotherapy/Phototherapy; Animal Surgery & Tissue Analysis in vivo Multimodal Cancer Imaging (FL, PET, SPECT); Radioligand Imaging & Therapy ...

Awards, Fellowships, & Grants

2018 **National Postgraduate Scholarship**, Sun Yat-sen University
2017-2020 **Postgraduate Studentship**, Sun Yat-sen University
2015 **Excellent Postgraduate Leader**, Wuhan Institute of Technology
2015 **Creative Research Funding for Postgraduate Education**, Wuhan Institute of Technology
2014-2017 **Postgraduate Fellowship**, Wuhan Institute of Technology
2013 **National Encouragement Scholarship**, Wuhan Institute of Technology
2012 **Merit Student**, Wuhan Institute of Technology

Research Experience

University of California, San Francisco - Department of Radiology and Biomedical Imaging, *San Francisco, CA*
Advisors: Prof. Prof. Michael Evans *2024- Present*
- Project: "Activatable Peptides for Enhanced Radioligand Therapy"

Sun Yat-sen University - School of Pharmaceutical Sciences *Shenzhen, China*

Co-Advisors: Prof. Wenbin Deng & Prof. Lin Mei *2021 - 2023*

- Project: "Artesunate-Modified Black Phosphorus Nanosheets for Enhanced Photo-Chemo-Dynamic Ferroptosis in Glioblastoma Treatment"

Sun Yat-sen University - School of Pharmaceutical Sciences *Guangzhou, China*

Co-Advisors: Prof. Wenbin Deng, Prof. Lin Mei & Dr. Gan Liu *2017 - 2021*

- Dissertation: "Heterobifunctional PEG-grafted Black Phosphorus Quantum Dots: "Three-in-One" Nano-platforms for Mitochondria-targeted Photothermal Cancer Therapy"

Wuhan Institute of Technology - College of Engineering and Pharmacy *Wuhan, China*

Advisor: Prof. Yihong Yang & Prof. Heng Zhang *2014-2017*

- Dissertation: "Synthetic Optimization of Istradefylline"

Wuhan Institute of Technology & Wuhan Renfu Pharmaceutical Industry Co.,Ltd. *Wuhan, China*

Advisor: Prof. Shuangxi Gu *2013-2014*

- Dissertation: "Determination of Dissolution of a Soft Capsule, RFCM2012-07"

Presentations

2019. Invited Speaker, The Eleventh National Conference on Chemical Biology

2015. Invited Speaker, National Student Essay Competition for Pharmaceutical Engineering Research

2013. Conference Speaker, The Sixth Pharmaceutical Forum in China Pharmaceutical University

Teaching Experience

2018 **Human Anatomy and Physiology**, Teaching Assistant

2017 **Pharmacology**, Teaching Assistant

Publications

Qi, J.; Xiong, Y.; Cheng, K.; Huang, Q.; Cao, J.; He, F.; Mei, L.; Liu, G.; Deng, W., Heterobifunctional PEG-grafted black phosphorus quantum dots:"Three-in-One" nano-platforms for mitochondria-targeted photothermal cancer therapy. ***Asian J. Pharm. Sci.*** 2021, 16 (2), 222-235.

Cheng, K.#; **Qi, J.**#; Zhang, J.; Li, H.; Ren, X.; Wei, W.; Meng, L.; Li, J.; Li, Q.; Zhang, H.; Deng, W.; Sun, H.; Mei, L., Self-assembled nano-photosensitizer for targeted, activatable, and biosafe cancer phototheranostics. ***Biomaterials*** 2022, 291, 121916. (*#Equal Contribution*)

Cao, J.#; **Qi, J.**#; Lin, X.; Xiong, Y.; He, F.; Deng, W.; Liu, G., Biomimetic black phosphorus nanosheet-based drug delivery system for targeted photothermal-chemo cancer therapy. ***Front Bioeng. Biotechnol.*** 2021, 9, 707208. (*#Equal Contribution*)

Xiong, Y.; He, C.; **Qi, J.**; Xiong, M.; Liu, S.; Zhao, J.; Li, Y.; Liu, G.; Deng, Black phosphorus nanosheets activate tumor immunity of glioblastoma by modulating the expression of the immunosuppressive molecule PD-L1. ***Biomaterials*** 2025, 317, 123062.

Cheng, K.; **Qi, J.**; Ren, X.; Zhang, J.; Li, H.; Xiao, H.; Wang, R.; Liu, Z.; Meng, L.; Ma, N.; Sun, H., Developing isoxazole as a native photo-cross-linker for photoaffinity labeling and chemoproteomics. ***Angew. Chem. Int. Ed.*** 2022, 61 (47), e202209947.

He, F.; Cao, J.; **Qi, J.**; Liu, Z.; Liu, G.; Deng, W., Regulation of stem cell differentiation by inorganic nanomaterials: recent advances in regenerative medicine. ***Front Bioeng. Biotechnol.*** 2021, 9, 721581.

Liu, G.; Tsai, H.-I.; Zeng, X.; **Qi, J.**; Luo, M.; Wang, X.; Mei, L.; Deng, W., Black phosphorus nanosheets-based stable drug delivery system via drug-self-stabilization for combined photothermal and chemo cancer therapy. ***Chem. Eng. J.*** 2019, 375, 121917.

Patents

Liu, G.; Deng, W.; **Qi, J.**, Huang, Q.; Lin, X.; Xiong, Y.; Cao, J.; He, F.; Liu, Z., The preparation method and application of black phosphorus material. ***CN Patent***, 2022, Priority No. CN202110258334.9

Deng, W.; Liu, J.; Mai, Y.; **Qi, J.**; Dou, L.; Qin, Y., A preparation method of oral black phosphorus nanomaterial and its application in gastrointestinal diseases. ***CN Patent***, 2022, Priority No. CN202210090594.4

Deng, W.; Huang, Q.; Liu, G.; **Qi, J.**, A stable targeted photothermal black phosphorus nanosheet formulation, its preparation method, and application. ***CN Patent***, 2022, Priority No. CN202110249057.5