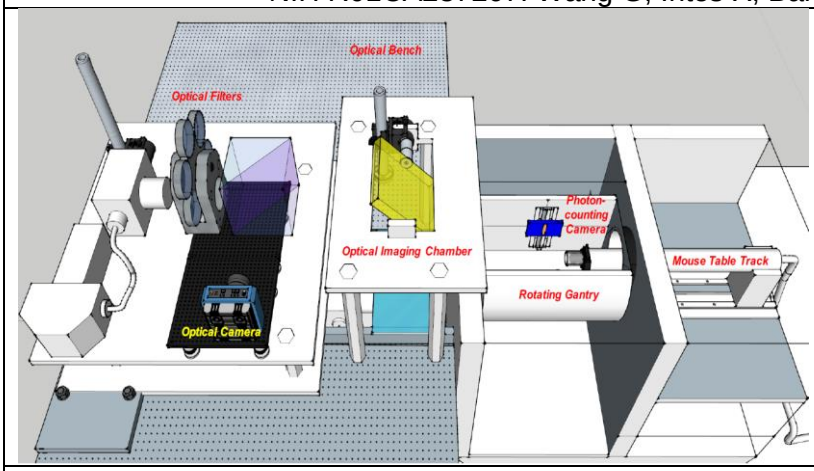
Biography in 100 Words: Ge Wang is Clark & Crossan Chair Professor and Director of Biomedical Imaging Center, RPI, USA. He focuses on medical imaging and AI. He published the first spiral cone-beam CT algorithm in the early 1990s. There are ~200 million CT scans yearly, with a majority in the spiral cone-beam mode. He published the first perspective on deep imaging in 2016 and many follow-up papers. He is Fellow of IEEE, SPIE, AAPM, OSA, AIMBE, AAAS, and NAI. His recent honors including IEEE R1 Outstanding Teaching Award, EMBS Career Achievement Award, SPIE Meinel Technology Award, and Sigma Xi Chubb Award for Innovation.

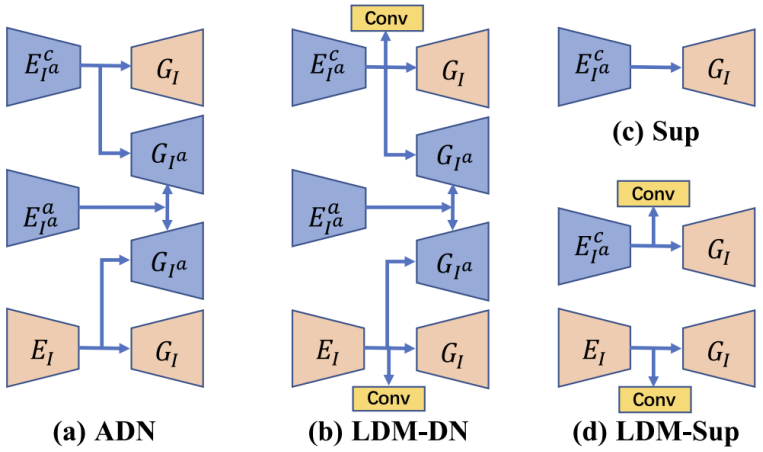
Two of Active Projects:

Photon-counting X-ray and Optical Tomography for Preclinical Cancer
NIH R01CA237267: Wang G, Intes X, Barroso M; 2024



The goal is to develop a hybrid x-ray and optical prototype for High-dimensional Optical Tomography (HOT) Guided-by Energy-resolved Micro-CT (GEM), visualize and quantitate breast tumor heterogeneity, HER2 expression and dimerization, and therapeutic response in preclinical models.

Constrained Disentanglement Network for CT Metal Artifact Reduction
NIH R01EB031102: Wang G, De Man B, Paganetti H; 2024



The overall goal of this project is to develop deep learning imaging methods to eliminate CT metal artifacts for commercial CT scanners and improve radiotherapy in particular. Since our approach is software-based, the path for technology transfer and clinical translation is well defined.

Two of Recent Papers:

- Peng YT, Li MZ, Grandinetti J, *Wang G, *Jia X: Top-level Design and Simulated Performance of the First Portable CT-MR scanner. IEEE Access, doi:10.1109/ACCESS.2022.3208278, 2022
- *Wang G, Badal A, Jia X, *Maltz JS, Mueller K, *Myers KJ, Niu C, *Vannier MW, Yan PK, Yu Z, Zeng RP: Development of Metaverse for Intelligent Healthcare. To appear in Nature Machine Intelligence, Nov. 2022

Google Scholar: https://scholar.google.com/citations?user=pjK2mQwAAAAJ&hl=en