

BIO

Dr. Wan-Tien (Austin) Chiang, Ph.D.

Dr. Chiang is a systems biologist who studies bioinformatics, biotechnology, computer science, and systems biology. The overarching goal of Dr. Chiang's research is to employ Bioinformatics, Multi-omics data analysis, Predictive Modeling, and Systems Biology techniques to study human disease, therapeutic protein manufacturing, and multicellular systems engineering. Dr. Chiang's work has practical applications in Biomedical Science Research (e.g., Human disease research such as *Staphylococcus aureus* (SA) infection, Eosinophilic Esophagitis (EoE) disease, and Autism Spectrum Disorder (ASD)) as well as biopharmaceutical industry (e.g., Biomanufacturing and bioprocessing technologies and Multicellular systems engineering). As a key personnel on several university- and government-funded grants, Dr. Chiang laid the groundwork for the research by developing effective algorithms and tools of biological modeling to model and simulate different biological systems. In addition, Dr. Chiang successfully collaborated with many outstanding researchers and produced several peer-reviewed publications from each project. As a result of these previous experiences, Dr. Chiang has published 39 manuscripts including twenty-nine peer-reviewed papers, six filed patents (Kellman, Provisional Patent, 2022; Fuerst, Patent WO2022165194, 2022; Lewis, Patent WO2022026944A1, 2022; Lewis, Patent WO2021099480A1, 2021; Lewis, Provisional Patent, 2021; Lewis, Patent WO2020046951A1, 2020), and four preprint papers (Chiang, bioRxiv, 2021; Robasky, bioRxiv, 2021; Pessentheiner, bioRxiv, 2021; Gazestani, bioRxiv, 2020) that have been submitted to top-ranked journals for consideration. These publications are results from four areas of research that Dr. Chiang has worked on for the past few years: 1) Biomanufacturing of Therapeutic Protein, 2) Engineering of Multicellular Systems, 3) Multi-omics Analysis on Human Diseases, 4) Bioinformatics and Systems Biology.