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GP-write

Matthew Wook Chang

Matthew Chang has made contributions in the field of engineering biology. His research interests lie in synthetic biology of microbial systems, with particular emphasis on development of synthetic microbes that perform programmable functions for engineering applications. In line with this emphasis, his current projects involve reprogramming of microbes for disease treatment and prevention, and biochemicals production, which have been funded by local and international funding organizations such as National Research Foundation, National Medical Research Council, A*STAR, National Environment Agency, Korean Ministry of Trade, Industry and Energy, U.S. Air Force, and U.S. Defense Threat Reduction Agency. In particular, he has pioneered the development of microbes programmed to perform targeted pathogen eradication. His scientific contributions have been recognised with international honours and awards, including the Scientific and Technological Achievement Award from U.S. Environmental Protection Agency, and featured worldwide in the public media, including the Economist, Reuters, Nature News, and Science. He serves as an editorial board member for ACS Synthetic Biology and Biotechnology Journal, and as an associate editor for Biotechnology for Biofuels.