

Joint research projects under the Executive Programme of Scientific and Technological Cooperation between Italy and Singapore for the years 2023-2025.

Research Area	Project Title	Singapore Principal Investigator	Italian Principal Investigator
ARTIFICIAL INTELLIGENCE	Artificial Intelligence for Advanced Air Traffic Flow Management	Alam Sameer <i>Nanyang Technological University ("NTU")</i>	Lulli Guglielmo <i>Università di Milano-Bicocca</i>
FOODTECH	BIZE_UrFarm: Building Integrated Zero Emission Urban Farming towards sustainable farmscape in Milan and Singapore	Soh Chew Beng <i>Singapore Institute of Technology ("SIT")</i>	Dessi Valentina Maddalena <i>Politecnico di Milano</i>
HEALTH	Development of a rapid T cell analysis test to guide management of patients with chronic HBV and HBV/HDV disease	Bertoletti Antonio <i>Duke-NUS Medical School ("DukeNUS")</i>	Lampertico Pietro <i>IRCCS Ca' Granda</i>
HEALTH	Reducing animal testing by validating the potency of a three- dimensional in vitro pancreatic tumor model to develop effective Immunotherapies	Adriani Giulia <i>A*STAR</i>	Cappello Paola <i>Università di Torino</i>
HEALTH	Dissecting the involvement of molecules of the humoral innate immunity in regulating stromal ECM remodeling in pancreatic cancer using deep spatial phenotyping	Biswas Subhra Kumar <i>A*STAR</i>	Doni Andrea <i>IRCCS Humanitas</i>
HYDROGEN-RELATED RESEARCH	Thin-film solid oxide fuel cell with hierarchical mixed oxides nanostructured electrodes	Lee Pooi See <i>NTU</i>	Comini Elisabetta <i>Università di Brescia</i>
HYDROGEN-RELATED RESEARCH	EURIPIDES- innovative Electrocatalysts based on quantum materials for the sustainable Production of hydrogen by Electrolysis	Zhang Yong-Wei <i>A*STAR</i>	Politano Antonio <i>Università di L'Aquila</i>
PHOTONICS	Ultrahigh sensitive photoacoustic multi-gas sensor for volatile organic compounds (VOCs) detections	Wang Qijie <i>NTU</i>	Spagnolo Vincenzo <i>Politecnico di Bari</i>
QUANTUM TECHNOLOGY	Hybrid quantum systems with magneto-mechanical cantilever resonators for quantum information and quantum sensing	Wang Tao <i>A*STAR</i>	Vinante Andrea <i>Consiglio Nazionale delle Ricerche ("CNR")</i>
ROBOTICS	Dextrous, strong yet soft robots	Laschi Cecilia <i>National University of Singapore ("NUS")</i>	Beccai Lucia <i>Istituto Italiano di Tecnologia ("IIT")</i>