

Application Results for 2021 Investigator Award Academia Sinica

A total of 30 applications were submitted for the 2021 Investigator Award Academia Sinica: 11 from the Division of Mathematics and Physical Sciences; 14 from the Division of Life Sciences; 5 from the Division of Humanities and Social Sciences). Of these, 12 were approved following First-round Review, Second-round Review and Budget Review meetings, including 5 from the Division of Mathematics and Physical Sciences, 4 from the Division of Life Sciences and 3 from the Division of Humanities and Social Sciences. Approved projects may not be executed until budget plans have been officially approved.

A. Division of Mathematics and Physical Sciences : (5 projects)

No	Project Title	Project Director	Institute or Research Center
AS-IA-110-M01	Szego, Bergman kernels asymptotic expansions and geometric quantization	Chin-Yu Hsiao	Institute of Mathematics
AS-IA-110-M02	Theoretical Exploration in Quantum Cryptography	Kai-Min Chung	Institute of Information Science
AS-IA-110-M03	Anthropogenic Aerosol Trace Metal Marine Biogeochemistry	Tung-Yuan Ho	Research Center for Environmental Changes
AS-IA-110-M04	Exploring the Interactions between Cells and Nanomaterials at Different Dimensions: from Single Molecule to Whole Animal Studies	Peilin Chen	Research Center for Applied Sciences
AS-IA-110-M05	Robust Statistical Methods for high-dimensional data with Application to 3D conformation analysis of Cryo-EM data	I-Ping Tu	Institute of Statistical Science

B. Division of Life Sciences : (4 projects)

No	Project Title	Project Director	Institute or Research Center
AS-IA-110-L01	Molecular mechanisms of endosymbiosis between ciliates and green algae	Jun-Yi Leu	Institute of Molecular Biology
AS-IA-110-L02	Structural insights into decay of oxidatively damaged mitochondrial RNA and DNA in health and disease	Hanna S. Yuan	Institute of Molecular Biology

AS-IA-110-L03	Synergetic mechanism of E. coli RNA turnover and energy production under oxygen-limited growth conditions	Sue Lin-Chao	Institute of Molecular Biology
AS-IA-110-L04	In-depth mechanistic study of extracellular trap-induced pulmonary innate lymphocyte activation in steroid-resistant asthma	Ya-Jen Chang	Institute of Biomedical Sciences

C. Division of Humanities and Social Sciences : (3 projects)

No	Project Title	Project Director	Institute or Research Center
AS-IA-110-H01	New Developments in Econometrics	Yu-Chin Hsu	Institute of Economics
AS-IA-110-H02	A reference grammar of Saisiyat	Elizabeth Zeitoun	Institute of Linguistics
AS-IA-110-H03	The Modern Transformation about the New Text School of the Late-Qing Dynasty	Chang-lin Tsai	Institute of Chinese Literature and Philosophy