## **Results of the 2021 Academia Sinica Career Development Award**

A total of 28 referrals were submitted for the 2021 Career Development Award: 12 from the Division of Mathematics and Physical Sciences; 14 from the Division of Life Sciences; 2 from the Division of Humanities and Social Sciences. Of these, 17 were awarded following Second-round Review and Budget Review Meetings, including 5 from the Division of Mathematics and Physical Sciences, 10 from the Division of Life Sciences and 2 from the Division of Humanities and Social Sciences. Awarded projects may not be executed until budget plans have been officially approved.

Awardees of the 2021 Academia Sinica Career Development Award

Project Number	Project Title	Awardee	Institute or Research Center
AS-CDA- 110-M05	Frontier of the Black Hole Astrophysics pioneered with precise direct imaging	Keiichi Asada	Institute of Astronomy and Astrophysics
AS-CDA- 110-M06	How are planets made in windy, turbulent disks?	Min-Kai Lin	Institute of Astronomy and Astrophysics
AS-CDA- 110-M07	Modeling 3-D radiative energy exchanges in the coupled land- atmosphere system from urban to planetary scale	Wei-Liang Lee	Research Center for Environmental Changes
AS-CDA- 110-M09	Enhancing Robustness of Visual AI Systems Against Deception	Jun-Cheng Chen	Research Center for Information Technology Innovation
AS-CDA- 110-M13	Next-generation bio-compatible short-wave infrared fluorescent quantum defects for cancer early detection	Ching-Wei Lin	Institute of Atomic and Molecular Sciences

A. Division of Mathematics and Physical Sciences (5 Awardees)

## B. Division of Life Sciences (10 Awardees)

Project	Project Title	Awardee	Institute or
Number			Research Center
AS-CDA-	Genome evolution and regulation in	Chuan Ku	Institute of Plant and Microbial
110-L01	giant viruses		Biology
AS-CDA- 110-L02	An evo-devo approach to dissect ciliary cell type diversity and function	Stephan Q. Schneider	Institute of Cellular and Organismic Biology

AS-CDA- 110-L03	Structural mechanism of antiviral defense by ubiquitination and ISGylation	Kuen-Phon Wu	Institute of Biological Chemistry
AS-CDA- 110-L04	Molecular control of synaptic transmission in health and disease	Chi-Kuang Yao	Institute of Biological Chemistry
AS-CDA- 110-L05	Uncovering the principle of neural circuit remodeling in the motor cortex during progressive motor learning	Yu-Wei Wu	Institute of Molecular Biology
AS-CDA- 110-L06	Exploring the neural basis of motivation	Suewei Lin	Institute of Molecular Biology
AS-CDA- 110-L07	Investigation of the oncogenic roles of WWP1 ubiquitin E3 ligase and its regulation in cancer progression, cancer predisposition and immune surveillance	Yu-Ru Lee	Institute of Biomedical Sciences
AS-CDA- 110-L08	Developing next-generation optogenetic technologies for precise manipulation of neurotransmission	Wan-Chen Lin	Institute of Biomedical Sciences
AS-CDA- 110-L09	A 3D chromatin organization study to investigate the T cell exhaustion mechanism	Shih-Yu Chen	Institute of Biomedical Sciences
AS-CDA- 110-L13	Manipulating the vertebrate "sterolbiome": isolation and molecular characterization of gut microbes capable of modulating sex steroid levels in vertebrate hosts	Yin-Ru Chiang	Biodiversity Research Center

## C. Division of Humanities and Social Sciences (2 Awardees)

Project Number	Project Title	Awardee	Institute or Research Center
AS-CDA- 110-H01	Reconceiving the Legitimacy of Administrative State	Cheng-Yi Huang	Institutum Iurisprudentiae

AS-CDA- N 110-H02 A	Model Averaging and its Applications in Economics	Chu-An Liu	Institute of Economics
------------------------	--	------------	------------------------