## Results of Applications for the 2014 Integrated Thematic Projects at Academia Sinica Announced

There is a total of 30 applications for the 2014 Thematic Projects (7 from Division of Mathematics and Physical Sciences; 19 from Division of Life Sciences; 4 from Division of Humanities and Social Sciences). The applications require a budget of NT\$270,502,000 in total (NT\$71,370,000 for Division of Mathematics and Physical Sciences; NT\$178,274,000 for Division of Life Sciences; NT\$20,858,000 for Division of Humanities and Social Sciences).

Of all the applications, 16 were approved in the meetings of the Second-round Review and Budget Review, including 4 from Division of Mathematics and Physical Sciences,9 from Division of Life Sciences, and 3 from Division of Humanities and Social Sciences. The total approved budget amounts to NT\$106,068,000 (NT\$26,384,000 for Division of Mathematics and Physical Sciences; NT\$65,905,000 for Division of Life Sciences; NT\$13,779,000 for Division of Humanities and Social Sciences). Please refer to the following table for detailed information.

**Type I:** The 1st category grants are unsolicited integrated research programs.

A. Division of Mathematics and Physical Sciences: (4 projects)

Project No.	Title of Thematic Project	Project Director	Institution
AS-103-TP-A01	Single molecule screening of aptamers by sub-wavelength nanoapertures— Toward Rapid Identification of Different Epitope-Binding Aptamers	Chia-Fu Chou Pei-Kuen Wei Lin-Chi Chen	Institute of Physics, Academia Sinica; Research Center for Applied Sciences, Academia Sinica; Department of Bio-Industrial Mechatronics Engineering, National Taiwan University
AS-103-TP-A02	Investigation of the Origin of Superconductivity in Fe-based Superconductors and the Search for New Novel Superconducting Materials	Shang-Fan Lee Maw-Kuen Wu Ming-Jye Wang	Institute of Physics, Academia Sinica; National Dong Hwa University; Institute of Astronomy and Astrophysics, Academia Sinica
AS-103-TP-A05	Computational Design of Low-Dimensional Advanced Materials	Mei-Yin Chou  Ching-Ming Wei  Guang-Yu Guo	Institute of Atomic and Molecular Sciences, Academia Sinica; Institute of Atomic and Molecular Sciences, Academia Sinica; Graduate Institute of Applied Physics, National Chengchi University
AS-103-TP-A06	Nano-plasmonic Structure for the Applications in Green Energy and Biomaterials	Din Ping Tsai	Research Center for Applied Sciences, Academia Sinica

**B.** Division of Life Sciences: (8 projects)

parasites- satellite RNAs associated with plant viruses  Ing-Nang Wang Ing-Nang Ing-Nang Wang Ing-Nang Wang Ing-Nang Wang Ing-Nang Wang Ing-Nang Ing-Nan	Project No.	Title of Thematic Project	Project Director	Institution
AS-103-TP-B05 Neural Morphogenesis: Molecular Mechanisms and Implications in Diseases  AS-103-TP-B06 Molecular basis for cysteine redox modifications in ischemic cardiomyopathy and cardioprotection  AS-103-TP-B10 Investigation of human Induced pluripotent stem cells (iPSC) as a potential therapeutic platform for polyglutamine (polyQ)-mediated neurodegenerative diseases  AS-103-TP-B11 Plant Phosphate Transporters: Structure, Mechanism and Regulation  AS-103-TP-B12 Structural-and-Functional Probing of the Dynamic Spliceosomal Assembly  Tien-Hsien Genomics Researc Center, Academia Sinica  Chih-Yu Chiu Biodiversity Researc Center, Academia Research Center, Academia Sinica  Chih-Yu Chiu  AS-103-TP-B15 Influence of global warming on subalpine lake ecosystems	AS-103-TP-B01	parasites- satellite RNAs associated with		Department of Biological Sciences, University at Albany, State University of
AS-103-TP-B11 Mechanism and Implications in Diseases  AS-103-TP-B12 Structural-and-Functional Probing of the Dynamic Spliceosomal Assembly  Molecular basis for cysteine redox modifications in ischemic cardiomyopathy and cardioprotection  Tzu-Ching Meng Chemistry, Acader Sinica  Tzu-Ching Meng Chemistry, Acader Sinica  Tzu-Ching Meng Chemistry, Acader Sinica  Yi-Juang Chern Institute of Biomedical Science Academia Sinica  Yi-Juang Chern Siemedical Science Academia Sinica  Tzyy-Jen Chiou Agricultural Biotechnology Research Center, Academia Sinica  AS-103-TP-B12 Structural-and-Functional Probing of the Dynamic Spliceosomal Assembly  AS-103-TP-B15 Influence of global warming on subalpine lake ecosystems  Chih-Yu Chiu Biodiversity Resear Center, Academia Center, Academia	AS-103-TP-B02		Tao-Shih Hsieh	Biology, Academia
modifications in ischemic cardiomyopathy and cardioprotection  AS-103-TP-B10 Investigation of human Induced pluripotent stem cells (iPSC) as a potential therapeutic platform for polyglutamine (polyQ)-mediated neurodegenerative diseases  AS-103-TP-B11 Plant Phosphate Transporters: Structure, Mechanism and Regulation  Plant Phosphate Transporters: Structure, Mechanism and Regulation  Tzyy-Jen Chiou Agricultural Biotechnology Research Center, Academia Sinica  AS-103-TP-B12 Structural-and-Functional Probing of the Dynamic Spliceosomal Assembly  Tien-Hsien Center, Academia Sinica  Center, Academia Sinica  Chih-Yu Chiu Biodiversity Research Center, Academia	AS-103-TP-B05		Yi-Ping Hsueh	Institute of Molecular Biology, Academia Sinica
stem cells (iPSC) as a potential therapeutic platform for polyglutamine (polyQ)-mediated neurodegenerative diseases  AS-103-TP-B11 Plant Phosphate Transporters: Structure, Mechanism and Regulation  AS-103-TP-B12 Structural-and-Functional Probing of the Dynamic Spliceosomal Assembly  Tien-Hsien Chang  Genomics Research Center, Academia Sinica  Tien-Hsien Chang  Genomics Research Center, Academia Sinica  Center, Academia Sinica  AS-103-TP-B15 Influence of global warming on subalpine lake ecosystems  Chih-Yu Chiu  Biodiversity Research Center, Academia	AS-103-TP-B06	modifications in ischemic cardiomyopathy	Tzu-Ching Meng	Institute of Biological Chemistry, Academia Sinica
Mechanism and Regulation  AS-103-TP-B12 Structural-and-Functional Probing of the Dynamic Spliceosomal Assembly  AS-103-TP-B15 Influence of global warming on subalpine lake ecosystems  Biotechnology Research Center, Academia Sinica  Tien-Hsien Chang Genomics Research Center, Academia Sinica  Chih-Yu Chiu Biodiversity Research Center, Academia	AS-103-TP-B10	stem cells (iPSC) as a potential therapeutic platform for polyglutamine (polyQ)-mediated neurodegenerative	Yi-Juang Chern	Biomedical Sciences,
Dynamic Spliceosomal Assembly  Chang  Center, Academia Sinica  AS-103-TP-B15  Influence of global warming on subalpine lake ecosystems  Chih-Yu Chiu  Biodiversity Resea Center, Academia	AS-103-TP-B11		Tzyy-Jen Chiou	Biotechnology Research Center,
lake ecosystems Center, Academia	AS-103-TP-B12			Genomics Research Center, Academia Sinica
Since	AS-103-TP-B15		Chih-Yu Chiu	Biodiversity Research Center, Academia Sinica

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

	· 1 0 /		
Project No.	Title of Thematic Project	Project Director	Institution
AS-103-TP-C02	Commonality and Divergence: the	Chao-Hen Liao	Institute of Chinese
	Convergence, Transmission, and Variation		Literature and
	of Cultural Images of East Asia before the		Philosophy,
	18th Century		Academia Sinica;
		Shiuh-Feng Liu	Research Center for
			Humanities and
			Social Sciences,
			Academia Sinica;
		Sheng-Chih Lin	Institute of History
			and Philology,
			Academia Sinica
AS-103-TP-C03	Social Media and Contingent Network	Yang-Chih Fu	Institute of
	Structures: Events, Boundaries, and		Sociology, Academia
	Diffusion		Sinica;
		Jing-Shiang	Institute of Statistical
		Hwang	Science, Academia
			Sinica
AS-103-TP-C04	The effects of neurocognitive aging on	Ovid J. L. Tzeng	Institute of
	executive functions in the human brain		Linguistics,
			Academia Sinica

TYPE II: The 2<sup>nd</sup> category grants are solicited research programs related to nation priority research themes.

A. Division of Life Sciences: (1 project)

Project No.	Title of Thematic Project	Project Director	Institution
AS-103-TP2-B03	Root Growth Promoting Genes as Molecular Markers for Breeding of Low-nutrient and Abiotic-stress Tolerant and High-yield Rice Cultivars	Su-May Yu	Institute of Molecular Biology, Academia Sinica