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SANTA BARBARA • SANTA CRUZ

UC DAVIS MEDICAL CENTER

SCHOOL OF MEDICINE DEPARTMENT OF DERMATOLOGY 3301 C STREET, SUITE 1400 SACRAMENTO, CALIFORNIA 95816 TELEPHONE (916) 734-6795 FAX: (916) 442-5702

September 12, 2018

Dear Selection Committee Members:

It is my pleasure and honor to nominate Dr. Fu-Tong Liu, MD, PhD, currently Vice-President of the Academia Sinica Taiwan, for the UC Davis Distinguished Emeritus Award.

Dr. Liu received his BS degree in Chemistry from National Taiwan University and PhD degree in Chemistry from University of Chicago. He performed postdoctoral work first in organic chemistry, next in immunology, and then joined the faculty at the Scripps Research Institute. He attended the two-year PhD to MD program at University of Miami and then received dermatology residency training at University of California-San Diego, while maintaining his research program. Rising in rank at Scripps, he served as Heads of the Allergy Research Section at the Scripps Research Institute and of the Division of Allergy at La Jolla Institute for Allergy and Immunology. He was appointed Professor (and then Distinguished Professor) and Chair of Dermatology, University of California-Davis. Since 2010, he has been Distinguished Research Fellow and Director, Institute of Biomedical Sciences, Academia Sinica, Taiwan. For the first two years, he was jointly employed by UC Davis and Academia Sinica. He became Professor Emeritus of UC Davis in 2012 and was appointed Vice President of Academia Sinica in 2016. I should mention that the Academia Sinica is the preeminent academic institution in Taiwan with an annual budget of US \$0.55 billion and 8000 employees in 2016 with extensive research in humanity, phsical sciences.

Dr. Liu has made major contributions to the fields of allergy, dermatology, and glycobiology. He contributed to the discovery and naming of the protein family galectins (galactose-binding animal lectins). Investigation of galectins is now a major branch in the field of glycobiology; there have been close to 7,000 scientific papers published to date with the keyword galectin. Developments in this area have had major implications for health and disease. Dr. Liu is highly regarded internationally as a pioneer in the studies of galectins in immunity, cancer, and adiposity. After he bacame Professor Emeritus, he continued to keep active research laboratory at Academia Sinica and publish high quality original research articles. His h-Index is 90 (according to Google Scholar). Since 2010, he has given over 100 lectures as invited speakers at national or international conferences or at universitites.

As Chair of Dermatology at UC Davis for ten years, Dr. Liu established strong basic science programs as well as clinical programs in the Department. He transformed the Department from a small clinical division at UC Davis School of Medicine to a much larger Department currently with the 5th highest clinical revenue in the medical school. Perhaps more importantly, he placed UC Davis Dermatology on the research map by recruiting high level researchers that currently place UC Davis in the top 9 NIH-funded dermatology departments in the nation.

Over the last eight years, at Academia Sinica, he developed a number of initiatives, including the studies of "inflammation and disease" and "glycomedicine", by engaging investigators at various institutes at Academia Sinica, as well as other institutions in Taiwan. More importantly, he has promoted science in Taiwan by leading a number of cutting-edge research and educational programs.

These include 1) strengthening research in immunology and promoting collaborations in this area (he is on the board of directors of Chinese Society of Immunology); 2) coordinating a national effort to promote research in glycoscience, and assisting a large number of investigators to get into this field (he is now overseeing the nationwide Glycoscience Program funded by the Ministry of Science and Technology); 3) facilitating research in investigative dermatology (he served as President of Taiwanese Society for Investigative Dermatology for three years); 4) serving in leadership positions in a number of educational programs. He is Director of the Translational Medicine Degree Program and plays a leadership role in the Taiwan International Graduate Program (TIGP), both at Academia Sinica; the stundents for the latter are mainly from developing countries; and 5) promoting the development of translational research program such as the Taiwan Biobank, a 12-year government-funded program initiated in 2012 aimed at banking health data and biospecimens from 200,000 healthy individuals and 100,000 subjects for 12 different disease categories.

Since 2016, as Vice President of Academia Sinica, Dr. Liu has taken up responsibilities to oversee a number of additional research and educational programs both at Academia Sinica and nationally. A major responsibility is overseeing the development of National Biotechnology Research Park, which was completed in June 2018, as well as its future operations, as Chair of the Joint Governing Board.

In his career, Dr. Liu has been collaborating with a large number of scientists in many countries, including a number of developing countries. He has made precious reagents and tools, including genetically engineered mice and monoclonal antibodies, available to a large number of laboratories in these countries, and provided guidance on their research. He has published a total of over 100 original articles with scientists in these countries. After he became Professor Emeritus, he continued to be engaged in many of these and new collaborations.

Dr. Liu continues to serve on the editorial board of a number of journals. These include Section Editor, Journal of Dermatological Science (till early 2018); Editorial Board, Clinical Reviews in Allergy and Immunology; Editorial Board, Journal of Medicinal Food; Reviewer Board, Journal of Allergy and Clinical Immunology; Editorial Board, Experimental Dermatology; Advisory Editorial Board, Kaohsiung Journal of Medical Sciences; Editorial Board, Glycobiology.

Dr. Liu was Elected to Academician (Taiwan equivalent of National Academy of Science, USA), Academia Sinica, Taiwan, in 2012. He was elected to American Association for the Advancement of Science (AAAS) Fellow, in 2013. He was First KIA Laureate of the 28th Khwarizmi International Award, in 2015. He received a Distinguished Scholar Award, the Phi Tau Phi Scholastic Honor Society, in 2017.

After he became Professor Emeritus, Dr. Liu has been an outstanding ambassador of UC Davis. In nearly all of the pulications in which he served as corresponding author, UC Davis was listed together with Academia Sinica as an affiliating institution. He has been devoting a great deal of efforts to promoting interaction and collaboration between Academia Sinica and UC Davis. For example, he has invited a large number of UC Davis faculty to Taiwan as speakers in lectureships, conferences, or seminars. He

was instrumental in continuation of the UC Davis Quarter abroad program on Pharmaceutical Chemistry at the Academia Sinica. He led three Academia Sinica delegations to attend bilateral conferences at UC Davis, one on Neuroscience, another on Chemical Biology, and the third on Genome, Glycome, and Microbiome of Plants and Animals.

In summary, Dr. Fu-Tong Liu is one of those rare individuals who has not only been a "star" in his scientific field, but has also been a transformative leader. His leadership at UC Davis was critical in making Dermatology at UC Davis a national leader with an NIH ranking that exceeds those of Duke, NYU, and some of the Harvard programs. During and then following his full-time faculty time at UC Davis, Dr. Liu returned to Taiwan to bring critical and scientific skills to his native country. His rapid rise in the leadership of the Taiwanese research community affirms his ability to make innovative, positive change. Needless to say, he has been an inspiration to countless students, fellows/residents, and young scientists both here and in Taiwan. In consideration of this award application, I would note that his work in Taiwan after he became Emeritus Professor is arguably the best and most important of his career given the sheer scope of the projects and number of researchers involved. I proudly nominate him for this distinguished award and hope that the committee feels likewise. Please feel free to contact me with questions.

Respectfully yours,

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Samuel T. Hwang, MD, PhD Chair and Professor Department of Dermatology UC Davis School of Medicine

CURRICULUM VITAE

Fu-Tong Liu, MD, PhD

Current Position

Vice President Academia Sinica Distinguished Research Fellow Institute of Biomedical Sciences Academia Sinica, Taiwan

Professor Emeritus Department of Dermatology UC Davis

Education

- National Taiwan University, Taipei, Taiwan, R.O.C., 1966-1970 B.S. in Chemistry, 1970
- The University of Chicago, Chicago, Illinois, 1971-1975 Ph.D. in Chemistry, 1976
- The University of Miami School of Medicine (Ph.D. to M.D. Program), 1985-1987. M.D., 1987

Professional Record

- Professor and Chair (2001-2010), Distinguished Professor (2011-2012), Professor Emeritus (2012-present), Department of Dermatology, University of California, Davis, School of Medicine, Sacramento, California
- Distinguished Research Fellow and Director (2010-2017), Distinguished Research Fellow (2017-present), Institute of Biomedical Sciences, Academia Sinica, Taiwan
- Professor (joint appointment), National Taiwan University, College of Medicine, Department of Dermatology, Graduate Institute of Immunology and Division of Microbiology, Taiwan, 2011-present
- Adjunct Professor, Institute of Clinical Medicine, National Yang-Ming University, College of Medicine, 2011-present
- Vice President, Academia Sinica, Taiwan, 2016-present

Awards and Honors

Elected to membership in American Dermatological Association, 2011 Honorary member, Taiwanese Dermatological Association, 2011 Elected to Academician, Academia Sinica, Taiwan, 2012 Elected to American Association for the Advancement of Science (AAAS) Fellow, 2013 Chair Professor, Kaohsiung Medical University, 2013-present Chair Professor, China Medical University, 2014-present Chair Professor, Tzu Chi University, 2015-present Distinguished Chair Professor, I-Shou University School of Medicine, 2016-present President, Taiwanese Society for Investigative Dermatology, 2015-2018 Khwarizmi International Award, 2015 President Shih-Liang Chien Lectureship, Academia Sinica, 2016 Distinguished Scholar Award, the Phi Tau Phi Scholastic Honor Society, 2017

Major Current Administrative Responsibilities

Program Director, Taiwan Biobank, 2012-present
Director, Translational Medicine Degree Program, Academia Sinica, 2012-present
Program Director, National Glycoscience Program, Ministry of Science and Technology, 2014-present
Board of Directors, National Health Research Institutes, 2016-present
Chair, Board of Directors, Pacific Science Association (PSA)-Republic of China Chapter, 2017-present
Director, Taiwan Animal Core Consortium (for phenotyping and drug evaluation), 2017-present
Chair, Joint Governing Board, National Biotech Research Park, 2017-present

Research Interests

Allergic inflammation, Glycobiology (Galectins: roles in immunity, inflammation, cancer, and adiposity), and Dermatology

Board Certification

The American Board of Dermatology, 1993 (renewed 2003, 2013)

Editorial Boards

Section Editor, Journal of Dermatological Science, 2005-2018 Editorial Board, Clinical Reviews in Allergy and Immunology, 2005-present Editorial Board, Journal of Medicinal Food, 2007-present Reviewer Board, Journal of Allergy and Clinical Immunology, 2008-present Editorial Board, Experimental Dermatology, 2013-present Advisory Editorial Board, Kaohsiung Journal of Medical Sciences, 2014-present Editorial Board, Glycobiology, 2016-present

Professional Organizations

American Academy of Dermatology American Association for the Advancement of Science American Association of Immunologists American Chemical Society American Dermatologic Association American Society for Clinical Investigation American Society for Investigative Pathology Association of American Physicians Association of Professors of Dermatology Chinese Society of Cell and Molecular Biology Chinese Society of Immunology Society for Investigative Dermatology Taiwan Society for Biochemistry and Molecular Biology Taiwanese Dermatological Association (Honorary) Taiwanese Society for Investigative Dermatology

Advisory Panels/Committees/Consultant

National/International

Grant reviews (NIH)

- NIH, Ad hoc review committees, 1992, 1994, 1996, 1998 (2), 2002 (2), 2003, 2004, 2005 (2), 2007 (3), 2009 (3), 2010
- NIH, review panel for "Atopic Dermatitis Research Network (ADRN) and the ADRN Statistical and Clinical Coordinating Center" (Chairperson), 2010
- NIH, reviewer, NIH Director's Early Independence Awards (DP5), 2014
- NIH, reviewer, Special Emphasis Panel (ZRG1 IMM-D) related to hypersensitivity and immune-mediated diseases, 2015

Grant review (Taiwan)

Reviewer, National Research Program for Biopharmaceuticals, 2011
Reviewer, NHRI-KMU co-operative project progress review, 2011
Member, Research Proposal Review Committee, Translational Research Program, Academia Sinica, 2010-present (Chair 2013-present)
Ad Hoc Reviewer, National Research Program for Biopharmaceuticals, 2012-2016
Ad Hoc Reviewer, National Science Council (Ministry of Science and Technology), 2012-present
Reviewer, National Health Research Institute, Intramural program, 2014
Reviewer, Evaluation of Institute of Molecular Medicine, College of Medicine, National Taiwan University, 2015
Reviewer, Program Projects, Kaohsiung Medical University, 2016
Member, the International Consultant Board for the Lipid Science and Aging Research Center (LSARC) at Kaohsiung Medical University, 2017-present

Grant reviews (other funding agencies)

Reviewer, Research Grant Council, Hong Kong, 2010 Reviewer, the Austrian Science Fund, 2012 Dutch Cancer Society, grant reviewer, 2014 Reviewer, The Canadian Glycomics Network (GlycoNet), a recently established Canadian Networks of Centres of Excellence, 2015 Reviewer, The Canadian Glycomics Network (GlycoNet), 2018

Societies/Associations/Programs

Member, American Skin Association Medical/Scientific Advisory Committee, 2004-present Member, University of Southern California, NIH Ultrasound Transducer Resource,

Advisory Committee, 2008-2010

Intramural (US)

Council of Chairs, UC Davis Health System, 2001-2012 Medical Staff Executive Committee, UC Davis Health System, 2001-2010

Internal Advisory Board, UC Davis Cancer Center, 2003-2012 Member, Institutional Research Grant Review Committee, 2006, 2008 Executive Committee, NCI/NIH-funded training program (T32) in Oncogenic Signals and Chromosome Break, UC Davis, 2006-present Cancer Center Executive Committee, 2007-2010 Member, Finance Committee, Practice Management Board, UC Davis Health System, 2007-2012 **Intramural/Extramural (Taiwan)** Advisory Council, National Taiwan University, College of Medicine, 2010-present Scientific Advisory Board, Genomic Research Center, Academia Sinica, 2011-2013 Member, Research Specialist Evaluation Committee, Academia Sinica, 2010-2013 Member, Integrity in Administration Evaluation Committee, Academia Sinica, 2010-2011 Advisory Committee, Incubation Center, Genomic Research Center, Academia Sinica, 2011-present Advisory Council, National Synchrotron Radiation Research Center, Taiwan, 2011present Appointment and promotion committee for technical track scientists, Academia Sinica, 2011-present Member, Environment, Safety, Health Management Committee, Academia Sinica, 2010-2013 Member, Board of Directors, Chinese Cell and Molecular Biology Society, 2011present Member, Board of Directors, Taiwanese Society of Investigative Dermatology, 2011present Principle Investigator, Taiwan Biobank, 2012-present Member, Bioimaging Advisory Council, National Synchrotron Raditation Research Center, 2011-2014 Member, Administrative and Technical Staff Evaluation Committee, Academia Sinica, 2011-2014 Member, Research Development Administration Committee, Academia Sinica, 2012-2014 Organizing leader, Animal models of human diseases, National Research Program for Biopharmaceuticals, 2012-2017 Advisory Board, Show Chwan Health Care System, 2012-2016 Member, Curriculum Development Committee, Taiwan International Graduate Program, Academia Sinica, 2012-2015 Member, Campus Design Committee, Academia Sinica, 2012-2014 Associate Director, Translational Medicine Graduate Program, Academia Sinica, 2012-present Coordinator, Core Facilities, National Biotechnology Research Campus Design Committee, 2012-2017 Advisory Board, I-Shou University, 2012-2013 Member, Nano Program Task Force, Academia Sinica, 2013-present

- Member, Medical Center Evaluation Committee, Ministry of Health and Welfare, 2013
- Member, Academic Research Performance Evaluation Committee, Academia Sinica, 2013-2014
- Member, Executive Committee, the Tang Prize (Asian Equivalent of the Nobel Prize), 2013-present
- Member, Organizing Committee, Academician Quarterly Meetings, Academia Sinica, 2013-2014
- Member, Review Committee, Young Scholar Outstanding Scholarly Work, Academia Sinica, 2013-2015
- Member, Director Selection Committee, Institute of Biological Chemistry, Academia Sinica, Taiwan, 2015-2016
- Director, National Glycoscience Program funded by Ministry of Science and Technology, Taiwan, 2014-present
- Advisory Board, Infectious Disease and Cancer Research Center, Kaohsiung Medical University, 2014- present
- Advisory Board, Biomarker and Biotechnology Development Center, Kaohsiung Medical University, 2014- present
- Member, Board of Directors, Taiwan Antibody Association, 2014-present
- Co-Director, International Collaborations, National Research Program for Biopharmaceuticals, 2015-2017
- President, Taiwanese Society for Investigative Dermatology, 2015-2018
- Member, Director Selection Committee, Genomics Research Center, Academia Sinica, Taiwan, 2015-2016
- Director, Program Office, Resource Centers, National Research Program for Biopharmaceuticals, 2016-2017
- Chair, Committee for Evaluation of Professional School of Veterinary Medicine, National Taiwan University, 2016
- Member of over 20 committees (Chairing a number of them) at Academia Sinica, as the function of Vice President of Academia Sinica, 2016-present
- Director, Taiwan Animal Core Consortium, 2017-present

Chair, Joint Governing Board, National Biotech Research Park, 2017-present

Chair or co-Chair of 22 Committees at Academia Sinica, as Vice President of the organization, 2016-present.

Teaching Activities/Programs (Taiwan)

- Faculty, Glycoimmunology Course, National Yang-Ming University, Taiwan, 2010 Faculty, Molecular Medicine Program, Academia Sinica, Taiwan, 2010-present Faculty, Taiwan International Graduate Program, Academia Sinica, 2010-present
- Faculty, Graduate Institute of Immunology, National Taiwan University, College of Medicine, 2011-present
- Faculty, Institute of Clinical Medicine, National Yang-Ming University, 2011-present Chair, Organizing Committee, International Conference on Inflammation and Disease, Academia Sinica, 2011
- Member, Education Committee, Graduate Institute in Life Sciences, National Defense Medical Center, 2010- present

Chair, Admission Committee, Translational Medicine Graduate Program, 2012present Chair, Organizing Committee, 2012 International Sialoglyco Conference, Academia Sinica, 2012 Member, Award Selection Committee, TienTe Lee Medical Foundation, 2012-present Chair, Organizing Committee, NHRI/IBMS International Conference of Inflammation, Cancer, and Metabolic Syndromes, Academia Sinica, 2012 Member of Board of Director, The Chinese Society of Cell and Molecular Biology, 2013-present Consultant, TienTe Lee Award Laureate Club, 2013-2016 Faculty, Glycomedicine Course, National Yang-Ming University, 2014 Faculty and Director, Glycoscience Workshop, Ministry of Science and Technology, Academia Sinica, 2014 Faculty, Translational Medicine, Translational Medicine Degree Program, Academia Sinica, 2014 Faculty, Introduction to Life Science, National Defense Medical Center, 2014 Chair, Organizing Committee, NHRI/IBMS International Conference of Inflammation and Disease, 2014 Co-Chair, Organizing Committee, Glycoscience Symposium (Glycoimmunology), Academia Sinica, 2014 Faculty and Director, Glycoscience Workshop, Ministry of Science and Technology, Academia Sinica, 2014 Co-Chair, Organizing Committee, Japan-Taiwan Nanomedicine Symposium, Academia Sinica, 2015 Faculty and Director, Glycoscience Workshop, Ministry of Science and Technology, Academia Sinica, 2015 Co-Chair, Organizing Committee, Glycoscience Symposium (Chemical Biology), Academia Sinica, 2015 Convener, Theme 4 (Health), Pacific Science Conference, Taipei, Taiwan, 2016 Faculty and Director, Glycoscience Workshop, Ministry of Science and Technology, Academia Sinica, 2016

Journal Reviews (since 1996 listed) (The number in parenthesis indicates the number of articles reviewed for the journal in the year)

- 2010 American Journal of Pathology, Cancer Research, Dermatology Online Journal (2), European Academy of Dermatology and Venereology, FAEB Journal, Future Cardiology, Glycobiology (2), Journal of Autoimmunity (6), Journal of Dermatological Science (20), Journal of Immunology (3), Journal of Allergy and Clinical Immunology (7), Journal of Cellular and Molecular Medicine, Journal of Medical Food (2), Molecular Immunology, Neurosurgery, Oncogene.
- 2011 American Journal of Pathology (3), Angiogenesis, Arch Oral Biology, Biochimica et Biophysica Acta, Clinical and Experimental Allergy, FASEB Journal, Frontiers in T Cell Biology, Journal of Autoimmunity (4), Journal of Allergy and Clinical Immunology (8), Journal of Dermatological Science (15), Journal of Immunology (3), Journal of Investigative Dermatology, Journal Leukocyte Biology (2), Journal of

Medicinal Food (2), Journal of Molecular Medicine, Journal of Oncology, Life Sciences.

- 2012 Acta Histochemica Review, BMC Cancer, Cancer Immunology Research, Carcinogenesis, Clinical Cancer Research, European Journal of Immunology, Experimental Dermatology, Glycobiology (3), Immunity, Journal of Allergy and Clinical Immunology (8), Journal of Biological Chemistry, Journal of Carbohydrate Chemistry, Journal of Dermatological Science (16), Journal of Immunology (2), Journal of Investigative Dermatology, Journal of Medicinal Food, Journal Medical Science, Pigmented Cell and Melanoma, PLoS One (2), Proceeding National Academy of Science USA.
- 2013 American Journal of Pathology, Arthritis Research & Therapy, Breast Cancer Research and Treatment, Carcinogenesis, Dermatology Online Journal, Experimental Dermatology (2), Experimental Lung Research, Future Cardiology, Glycobiology (2), Journal of Allergy and Clinical Immunology (6), Journal of Biomedical Sciences, Journal of Dermatological Science (16), Journal of Immunology (2), Lung Cancer, Nature Communications, PLoS One, Proceeding National Academy of Science USA, Respiratory Research, Trends in Endocrinology & Metabolism.
- 2014 Apoptosis, Cancer Immunology Research, Cellular Microbiology, Cellular Physiology and Biochemistry, Experimental Dermatology (2), Frontiers in Immunology, Glycobiology, Journal of Allergy and Clinical Immunology (13), Journal of Autoimmunity, Journal of Biomedical Science, Journal of Dermatological Science (11), Journal of Immunology (2), Journal of Molecular Medicine, Leukemia and Lymphoma, Neoplasia, Oncotarget (3), PLoS One, Veterinary Sciences.
- 2015 American Journal of Pathology, BMC Immunology, Carcinogenesis, Clinical Medicine Insights: Oncology, eLife, Experimental Biology and Medicine, Experimental Dermatology (3), Fish and Shellfish Immunology, Glycobiology, International Journal of Cosmetic Science, Journal of Allergy and Clinical Immunology (7), Journal of Biomedical Science, Journal of Dermatological Science (10), Journal of Immunology (3), Journal of Investigative Dermatology, Journal of Leukocyte Biology, Molecular and Cellular Biochemistry, Nature Communications, Oncotarget (2), Vascular Pharmacology.
- 2016 Current Medicinal Chemistry, Experimental Dermatology (3), Journal of Allergy and Clinical Immunology (5), Journal of Autoimmunity, Journal of Dermatological Science (12), Journal of Investigative Dermatology (2), Journal of Medicinal Food, Mediators of Inflammation, PLoS One, Proceeding National Academy Science USA, World Allergy Organization Journal.
- 2017 American Journal of Pathology, Cell Physiol and Biochem, Experimental Dermatology (3), Glycobiology (4), Journal of Allergy and Clinical Immunology (8), Journal of Allergy and Clinical Immunology In Practice (2), Journal of Autoimmunity, Journal of Dermatological Science (2), Journal of Immunology, Journal of Investigative Dermatology, Mediators of Inflammation, Nature Communications, Oncotarget, Proceeding National Academy Science USA, Scientific Reports (2).
- 2018 American Journal of Pathology, Archive Dermatology Research, British Journal of Dermatology, Cancer Research, Experimental Dermatology, Glycobiology, iScience,

Journal of Allergy and Clinical Immunology (8), Journal of Immunology (2), Journal of Dermatological Science.

Invited Lectures (1994-present listed; edited by mahl to be since retirement in 2010)

2010	San Diego Glycobiology Symposium, San Diego, CA				
	Cincinnati Dermatology Society, Cincinnati, OH				
	University of Cincinnati, Department of Dermatology grand rounds, Cincinnati, OH Workshop on Recognition of host and pathogen glycans by mammalian GBPs and Mammalian GBPs in immune cell communication. Bethesda, MD				
	Molecular Medicine Program Institute of Riomedical Sciences and National Vang-				
	Ming University				
	Global Chinese Dermatologist Summit, Suzhou, China				
	Asian Consortium of Glycobiology and Glycotechnology, Taiwan				
	International Conference of Inflammation, Cardiometabolic Diseases and Cancer National Yang-Ming University Taiwan				
	Formosa Medical Association Annual Meeting Taiwan				
	Taiwanese Dermatological Association Annual Meeting, Taiwan				
	China Medical University Taichung Taiwan				
2011	Kaohsiung Medical University, Kaohsiung, Taiwan				
2011	Keystone Symposium: New Frontiers at the Interface of Immunity and Glycobiology				
	Lake Louise Alberta Canada				
	Agricultural Biotechnology Research Center, Academia Sinica, Taiwan				
	Chang Gung Memorial Hospital, Linko, Taiwan				
	National Defense Medical University, Taipei				
	Taipei Medical University, Taipei				
	Veterans Administration Hospital, Taichung, Taiwan				
	Chung-Shan University, Taiwan				
	Central Taiwan University of Science and Technology, College of Health Science, Taichung, Taiwan				
	Taiwan-Swiss Joint Symposium, Chiau Shi, Taiwan				
	Frontiers in Biomedical Sciences, Academia Sinica-Kaohsiung Medical University Joint Symposium Kaohsiung Taiwan				
	2011 Symposium on Frontiers of Biomedical Sciences, Chinese Medical University, Taiwan				
	The Second Cross Strait Immunology Conference, Taiwan				
	International Symposium on Inflammation and Disease (on Cardiovascular Disease,				
	Neurological Disease, and Cancer), Institute of Biomedical Sciences, Academia Sinica, Taiwan				
	Japanese Society of Allergology annual meeting, Tokyo, Japan				
2012	Twentieth Symposium on Recent Advances in Cellular and Molecular Biology, The Chinese Society of Cell and Molecular Biology				
	15 th San Diego Glycobiology Symposium, San Diego, CA				
	Industrial Technology Research Institute, Taiwan				
	18 th Users' Meeting and Workshops o X-ray Bioimaging and Powder Diffraction				
	Galectins and Galectin Therapeutics, Boston				

Third Cross Strait Immunology Conference, Hefei, An-Hui, China Life Sciences Across the Strait Conference, Beijing, China Rheumatology Association, R.O.C Annual Meeting, Tainan, Taiwan 2013 National Taiwan University College of Medicine, Research Forum Institute of Physics, Academia Sinica, Taiwan Riken-Academia Sinica Joint Conference on Chemical Biology, Taiwan Research Center for Applied Science, Academia Sinica, Taiwan Tzu-chi University, College of Medicine, Taiwan Taipei Medical University, Taiwan Cross-strait Immune Cell Biology Conference, Xingjiang, China Annual meeting of Taiwan Genomic Medicine and Biomarker Society, Taiwan 4th Drug Development Conference and Animal Pharmacology Operation Workshop, Taiwan Institute of Clinical Medicine, Cheng Kung University, School of Medicine, Taiwan Academia Sinica – UC Davis Joint Conference on Chemical Biology, Davis, CA Asia Pacific Congress or Allergy, Asthma and Clinical Immunology (APCAACI) (Plenary Lecture), Taiwan Taiwanese Society of Investigative Dermatology, Winter Retreat 2014 Taiwan-Japan Symposium on Nanomedicine, Nagoya, Japan Department of Dermatology, Kyoto University, Kyoto, Japan Chinese Immunology Society, Winter Conference, Taiwan National Taiwan University, College of Medicine, Research Seminar, Taiwan San Diego Glycobiology Symposium, San Diego, CA Institute of Biomedical Sciences, Academia Sinica, Taipei, Taiwan National Health Research Institutes, Chu-Nan, Taiwan 4th Cross-Strait Immunology Conference, Taipei, Taiwan From Bench to Bedside: Understanding Translational Research, Development Center for Biotechnology The Future Perspective of Translational Medicine and Biotechnology, National Taiwan University, Taiwan Symposium for the Newly Elected Academicians, Academia Sinica, Taiwan 12th Taiwan International Symposium on Statistical Physics and Complex Systems Keynote lecture, Retreat, Molecular Medicine Graduate Program, National Yang-Ming University-Institute of Biomedical Sciences, Academia Sinica 5th Drug Development Conference and Animal Pharmacology Operation Workshop, Taiwan National Cheng Kung University, School of Medicine, Tainan, Taiwan Kaohsiung Chang Gung Memorial Hospital, Kaohsiung, Taiwan Kaohsiung Medical University, Center for infectious Disease and Cancer Research, Kaohsiung, Taiwan National Defense Medical Center, Taipei, Taiwan National Taiwan University, College of Life Science, Taipei, Taiwan Glycoimmunology Symposium, Academia Sinica, Taiwan China Medical University, Tai-Chung, Taiwan 6th Taiwan-Japan Symposium on Nanomedicine, Academia Sinica, Taiwan 2015

- 17th International Conference on Emerging Infectious Diseases, Academia Sinica, Taiwan
- Tokyo University-National Taiwan University Frontier Bioscience Joint Symposium, Taiwan
- SNUCRI Cancer Symposium: Innovative Approaches to Explore Novel Druggable Targets, Hwasun-gun, Jeollanam-do, Korea
- National Taiwan University Veterinary Hospital, Taiwan
- 2015 Taiwanese Allergy Asthma and Clinical Immunology Society Annual Meeting, Taiwan
- Chung-Shan Medical University, College of Life Sciences, Taichung, Taiwan
- 2015 Taiwan-US Biotech Business Forum, Philadelphia, PA
- Merck Research Laboratories, Boston, MA
- Department of Chemistry, University of California-Davis, Davis, CA
- EMBO Workshop on Cell Biology of Animal Lectins, Weizmann Institute, Israel
- University of Michigan Medical School-Taiwan Bilateral Meeting, Academia Sinica, Taiwan
- 15th SCBA Internationak Symposium of the Society of Chinese Bioscientists in America, Academia Sinica, Taiwan
- Glyco²³: 23rd International Symposium on Glycoconjugates, Split, Croatia
- Tzu Chi University. Frontier of Medical Science: From Translational Medicine to Epidemiology, Hualien, Taiwan
- Bilateral Workshop, Academia Sinica-Institute for Glycomics, Griffith University, Australia
- 2nd International Conference of Traditional and Complementary Medicine on Health, Taiwan
- Mini-Symposium on Soft X-ray Tomography in Biomedical Sciences, Academia Sinica, Taiwan
- Tzu Chi University, Chair Professor Lecture
- 2016 Tzu Chi University, Chair Professor Lecture
 - Taiwan-Japan Nanomedicine Symposium, Kyoto, Japan Genentech, San Francisco
 - Professor Tung-Bi Lo 90th Birthday Symposium, Academia Sinica, Taiwan.
 - President Shih-Liang Chien Lectureship, Academia Sinica, Taiwan
 - Academic Research Organization, Tokyo, Japan
 - AS IBMS-RIKEN IMS Joint Workshop, RIKEN, Yokohama, Japan
 - 26th Annual Meeting of the Korean Society for Investigative Dermatology, Seoul Korea
 - Taiwan Rheumatology Association, Annual Spring Meeting, Taiwan
 - National Central University, Department of Biomedical Sciences, Distinguished Lecture Series, Chung-Li, Taiwan
 - Formosa Medical Association Spring Meeting, Taiwan
 - 2016 IMMUNOLOGY (AAI annual meeting) Chinese Society of Immunology, Taiwan (CSIT) Symposium
 - 9th International Conference and Commemorate Lecture of Pin-Wen Lin of Pancreatic Cancer, National Cheng-Kung University, Tainan, Taiwan
 - International Conference on Biomedical Sciences, China Medical University,

Taichung, Taiwan

- 7th Annual Institutes of Clinical Medicine Joint Research and Teaching Workshop
- TienTe Lee Award Laureate Club
- International Advanced Immunology Summer School, China Medical University, Taichung, Taiwan
- Asia ARO Network Workshop, Osaka, Japan
- Post-HUPO Glyco mini-symposium, Academia Sinica, Taiwan
- 第十二屆海峽兩岸三地植物分子生物學與生物技術學術研討會
- EMBO Workshop, Transducing Glycan Information into Function: Lessons from and for Galectins, Nice France.
- Tzu Chi University, Chair Professor Lecture
- 2017 Wang-Fang Hospital, Taipei, Taiwan
 - I-Shou University, Kaohsiung, Taiwan
 - Mackay Medical College, New Taipei, Taiwan
 - Tri-Service General Hospital, Taipei, Taiwan
 - Changhua Christian Hospital, Changhua, Taiwan
 - Taichung Armed Forces General Hospital, Tai-Chung, Taiwan
 - 12th Jenner Glycobiology and Medicine Symposium, Dubrovnik, Croatia
 - 23rd Annual Meeting of Chinese Society of Dermatology, Chongqing, China
 - 1st Taiwan-Germany Bilateral Symposium on Cancer Biology, Academia Sinica, Taiwan
 - Mini-symposium on Autophagy, Academia Sinica, Taipei, Taiwan
 - The Phi Tau Phi Scholastic Honor Society (Distinguished Scholar Award), Tainan, Taiwan.
 - Academia Sinica-U Michigan Medical School Bilateral Symposium, Ann Arbor, Michigan
 - 2017 Grand Future of Biotechnology Forum-the Grand Future of Biomedical Industry
 - Tzu Chi University, Chair Professor Lecture
 - 2017 Bio Tech Talent Symposium, Tainan, Taiwan
- 2018 Academia Sinica-UC Davis Bilateral Joint Symposium (Genome, Glycome, and Microbiome of Plants and Animals)
 - The 2nd Asian Microbiome Conference
 - Academician Cheng-Wen Wu Lecture, the 33rd Biomedical Societies Joint Annual Meeting
 - Kyushu University Hospital, Kyushu, Japan
 - Current Biomedical Sciences Lectureship, China Medical University
 - 6th Biologics World Taiwan 2018
 - The 11th International Symposium on Glycosyltransferases, Qingdao, China 國防醫學院生命科學研究所 第 18 屆研究生論文研討會
 - 2018 台灣過敏氣喘暨臨床免疫醫學會
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Patents

Patent Title	Inventor	Patent no.	Issue Date	Assignee
Reducing galectin-12 activity to influence the cell	<u>Fu-Tong Liu;</u> Wei-Chen Hsieh; Ri-Yao Yang	US 9,121,021	9/1/15	Academia Sinica
Small interfering RNA and pharmaceutical composition and method for inhibiting galectin-12 expression and/or enhancing lipolysis containing the same	Yen-Ju Lin; Jui- Wen Huang; <u>Fu-Tong Liu;</u> Huan-Yuan Chen; Wei-Chen Hsieh	US 9,777,273	10/3/17	Industrial Technology Research Institute; Academia Sinica