

Curriculum Vitae Su-Chiung Fang (方素瓊)

Professional Positions Held

2017-present	Associate Research Fellow, Academia Sinica, Taiwan
2017-present	Adjunct Associate Professor, National Chung Hsing University, Taiwan
2017-present	Adjunct Associate Professor, National Cheng Kung University, Taiwan
2014-2017	Adjunct Assistant Professor, National Chung Hsing University, Taiwan
2010-2017	Adjunct Assistant Professor, National Cheng Kung University, Taiwan
2009-2017	Assistant Research Fellow, Academia Sinica, Taiwan
2008-2009	Team and project leader, Sapphire Energy, USA

Education and Training

2003-2008	Post-doctoral researcher, The Salk Institute for Biological Studies, USA
2002	Post-doctoral researcher, University of California at San Diego, USA
2001	Ph.D., Botany, University of Wisconsin-Madison, USA
1997	M.S., Plant Pathology, University of Wisconsin-Madison, USA
1991	B.S., Plant Pathology, National Chung Hsing University, Taiwan

Professional Experience and Honors

2018-2019	General Secretary of Taiwan Society of Plant Biologists
2016	Special award for outstanding talents (大專校院獎勵特殊優秀人才)
2011	2011 Women's Young Investigator Travel Awards for American Society of Plant Biologists' meeting
2010	Travel award for 14 th International Conference on the Cell and Molecular Biology of <i>Chlamydomonas</i>
2008	Cover image of The <i>Chlamydomonas</i> Sourcebook, Volume 1, The second edition
2007	Poster award for the Salk Science Day
2006	Travel award for 12 th International Conference on the Cell and Molecular Biology of <i>Chlamydomonas</i>
2004	Travel award for 11 th International Conference on the Cell and Molecular Biology of <i>Chlamydomonas</i>
2003-2004	Pioneer Fund Post-doctoral Fellowship
1989	Association President Scholarship, Chung Hsing University, Taiwan

Teaching Experience

Since joining ABRC

2015-now	Advanced Plant Physiology Institute of Tropical Plant Sciences, National Cheng Kung University
2012-2014	Biotechnology Department of Life Sciences, National Cheng Kung University
2010-now	Molecular and Cellular Approaches for Biotechnology Molecular and Biological Agriculture Sciences/Taiwan International Graduate Program, Academia Sinica
2010	Advanced Plant Physiology Institute of Tropical Plant Sciences, National Cheng Kung University
2010 Summer	Algae-based biofuel: development and applications (Teach Three-Day Laboratory Practices)

Department of Life Sciences, National Cheng Kung University

Before joining ABRC

Mar. 2004 The Salk High School Science Day Program
The Salk Institute for Biological Studies
Jan. 2003 The Aaron Price Foundation Fellows high school program
The Salk Institute for Biological Studies
1998-1999 Biology Core Curriculum 323 Organismal Biology
University of Wisconsin-Madison
1997-1998 Botany 130 Introductory Plant Biology
University of Wisconsin-Madison
1995 Plant Pathology 505 Plant-Microbe Interactions
University of Wisconsin-Madison

Ad Hoc Reviewer for International Journals

Plant Physiology, Plant and Cell Physiology, PLOS ONE, Energy Conversion and Management, Plant Cell Tissue and Organ Culture, and Botanical Studies.

Memberships in Professional Society

American Society of Plant Biologists
Genetics Society of America
Botanical Society of Republic of China
Taiwan Phycological Society

Trainees' received Awards

2018 Yang-Ling Lin, PhD student of Degree Program with National Chung Hsing University - First Place Oral Presentation Competition Award in 2018 Plant Biology Summer Camp and Taiwan Society of Plant Biologists meeting
2016 Yang-Ling Lin, PhD student of Degree Program with National Chung Hsing University - First Place Poster Award in 2016 Taiwan Society of Plant Biologists meeting
2016 Miao-Ju Wei, Research Assistant - Poster Award in 2016 Taiwan Society of Plant Biologists meeting
2013 Chin-Lin Chung, PhD student of Degree Program with National Sun Yat-sen University - 2013 Cold Spring Harbor Asia Poster Award
2012 Chun-Han Chen, MS student of National Cheng Kung University - First Place Poster Award in 2012 Taiwan Society of Plant Biologists meeting

Scientific Publications

Since joining ABRC

1. Hsiang-Yin Lin, Jhun-Chen Chen, **Su-Chiung Fang*** (2018) A protoplast transient expression system to enable molecular, cellular, and functional studies in

- Phalaenopsis* orchids. *Frontiers in Plant Science*. 9:843. (Impact factor: 3.678, Ranking: 24/222 Plant Sciences)
- Jhun-Chen Chen, Miao-Ju Wei, **Su-Chiung Fang*** (2016) Expression analysis of fertilization/early embryogenesis-associated genes in *Phalaenopsis* orchids. *Plant Signaling & Behavior*. 11(10): e1237331.
 - Tien-Kuan Chen, Hui-Ting Yang, **Su-Chiung Fang**, Yi-Chen Lien, Ting-Ting Yang, and Swee-Suak Ko (2016) Hybrid-Cut: An improved sectioning method for recalcitrant plant tissue samples. *JoVE*. 117. DOI:10.3791/54754
 - Su-Chiung Fang***, Jhun-Chen Chen, Miao-Ju Wei (2016) Protocorm and protocorm-like bodies are molecularly distinct from zygotic embryos of *Phalaenopsis aphrodite*. *Plant Physiol*. 171: 2682-2700. (Impact factor: 5.949, Ranking: 11/222 Plant Sciences)
 - Jhun-Chen Chen, **Su-Chiung Fang*** (2016) The long pollen tube journey and *in vitro* pollen germination of *Phalaenopsis* orchids. *Plant Reproduction* 29 (1-2):179-188. (Impact factor: 2.707, Ranking: 51/222 Plant Sciences).
 - Su-Chiung Fang***, Chin-Lin Chung, Chun-Han Chen, Cristina Lopez-Paz, James G. Umen (2014) Defects in a new class of sulfate/anion transporter link sulfur acclimation responses to intracellular glutathione levels and cell cycle control. *Plant Physiol*. 166 (4): 1852-1868. (Impact factor: 5.949, Ranking: 11/222 Plant Sciences)
 - Hsiang-Yin Lin, Jhun-Chen Chen, Miao-Ju Wei, Yi-Chen Lien, Huang-Hsien Li, Swee-Suak Ko, Zin-Huang Liu, **Su-Chiung Fang*** (2014) Genome-wide annotation, expression profiling, and protein interaction studies of the core cell-cycle genes in *Phalaenopsis aphrodite*. *Plant Mol. Biol.* 84 (1-2), 203-226. (Impact factor: 3.543, 30/222 Plant Sciences)
 - Bradley J. S. C. Olson, Michael Oberholzer, Yubing Li, Matt J. Zones, Harjivan S. Kohli, Katerina Bisova, **Su-Chiung Fang**, Jill Meisenhelder, Tony Hunter, James J. Umen (2010) Regulation of the Chlamydomonas cell cycle by a stable, chromatin-associated retinoblastoma tumor suppressor complex. *Plant Cell* 22 (10): 3331-3347. (Impact factor: 8.228, Ranking: 6/222 Plant Sciences)

Before joining ABRC

- Su-Chiung Fang** and James G. Umen (2008) A suppressor screen in *Chlamydomonas* identifies novel components of Retinoblastoma tumor suppressor pathway. *Genetics* 178 (3), 1295–1310 (Impact factor: 4.075, Ranking: 38/171 Genetics & Heredity)
- Su-Chiung Fang**, Chris de los Reyes and James G. Umen (2006) Regulation of cell size checkpoint control by the Retinoblastoma tumor suppressor pathway. *PLOS Genetics* 2 (10): e167 (Impact factor: 5.540, Ranking: 22/171 Genetics & Heredity)
- Jun-Zhi Wei, Kristina Hale, Lynn Carta, , Edward Platzer, Cynthia Wong, **Su-Chiung Fang** and Raffi V. Aroian (2003) *Bacillus thuringiensis* crystal proteins that target nematodes. *Proc. Natl. Acad. Sci. USA*. 100: 2760-2765 (Ranking: 4/63 Multidisciplinary Sciences)
- Su-Chiung Fang** and Donna E. Fernandez (2002) Effect of regulated overexpression of the MADS domain factor AGL15 on flower senescence and fruit maturation. *Plant Physiol*. 130: 78-89 (Impact factor: 5.949, Ranking: 11/222 Plant Sciences)
- Donna E. Fernandez, Gregory R. Heck, Sharyn E. Perry, Sara E. Patterson, Anthony B. Bleecker, and **Su-Chiung Fang** (2000) The embryo MADS domain factor AGL15 acts postembryonically: inhibition of perianth senescence and abscission via constitutive expression. *Plant Cell* 12: 183-197 (Impact factor: 8.228, Ranking: 6/222 Plant Sciences)
- Su-May Yu, Yi-Ching Lee, **Su-Chiung Fang**, Ming-Tsair Chan, Soon-Far Hwa, and Li-Fei Liu (1996) Sugars act as signal molecules and osmotica to regulate the expression of alpha-amylase genes and metabolic activities in germinating cereal grains. *Plant Mol. Biol.* 30: 1277-1289 (Impact factor: 3.543, 30/222 Plant Sciences)

Book Chapters

1. **Su-Chiung Fang** (2019) Metabolic engineering and molecular biotechnology of microalgae for fuel production. In *Biofuels from Algae*, 2nd Edition, Elsevier, Amsterdam, pp 89-107.
2. **Su-Chiung Fang** (2014) Metabolic engineering and molecular biotechnology of microalgae for fuel production. In *Biofuels from Algae*, 1st Edition, Elsevier, Amsterdam, pp 47-65

Invited Talks (Overseas, 2009-now)

- 2016 The 17th International Conference on the Cell and Molecular Biology of Chlamydomonas (June 28-July 1), Kyoto, Japan
- 2014 Plant Cell Cycle Workshop (June 25-27). Třeboň, Czech Republic.
- 2014 The 16th International Conference on the Cell and Molecular Biology of Chlamydomonas (June 8-13), Pacific Grove, California, USA
- 2012 Institute of Microbiology AS, Czech Republic (June 12). Třeboň, Czech Republic.
- 2012 The 15th International Conference on the Cell and Molecular Biology of Chlamydomonas (June 5-10), Potsdam, Germany
- 2010 The 14th International Conference on the Cell and Molecular Biology of Chlamydomonas (June 6-10), Norton, Massachusetts, USA

Invited Talks (Domestic, 2009-now)

- 2018 Department of Biotechnology and Bioindustry Science, National Cheng Kung University (June 4)
- 2017 Taiwan-Japan 2017 Plant Biology Conference (Nov. 3-6)
- 2015 Department of Plant Pathology, National Chung Hsing University (Apr. 9)
- 2014 Department of Life Sciences, National Chung Hsing University (Sep. 19)
- 2014 1th Cross-Strait Conference on Algae and Industry Forum (May 4)
- 2013 Institute of Plant Biology, National Taiwan University (Dec. 30)
- 2013 4th Cross-Strait Conference on Plant Biology (Nov. 20)
- 2012 Department of Life Sciences, National Central University (Nov. 6)
- 2011 The Botanical Society of Republic of China Annual Meeting in Plant Sciences (Nov. 14)
- 2011 Institute of Tropical of Plant Sciences, National Cheng Kung University (Nov. 20)
- 2011 International Workshop on Microalgal Biofuel Technology (Aug. 26)
- 2011 Department of Biological Sciences and Technology, National University of Tainan (Jan. 5)
- 2010 Department of Life Sciences, National Cheng Kung University (Mar. 9)
- 2009 Institute of Tropical of Plant Sciences, National Cheng Kung University (Nov. 6)
- 2009 Department of Plant Pathology, National Chung Hsing University (Oct. 15)
- 2009 Psychological Society of Taiwan (Oct. 6)

National and International collaboration

- | | |
|---------------------|---|
| Dr. Yu-Liang Yang | Agricultural Biotechnology Center, Academia Sinica |
| Dr. Robert Schmitz | Department of Genetics, University of Georgia, USA |
| Dr. Miroslav Strnad | Department of Experimental Botany, National Academy of Sciences, Czech Republic |
| Dr. Frederick Cross | Laboratories of Cell Biology, The Rockefeller University, USA |