

Biographical Sketch - Eric Lam

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A. PROFESSIONAL PREPARATION

State University of New York at Stony Brook, NY	Chemistry	BS, 1980
University of California at Berkeley, CA	Biophysics	PhD, 1984
The Rockefeller University, NY	Plant Molecular Biology	Postdoc, 1985-1989

B. APPOINTMENTS

2014-15	Fulbright-Brazil Scientific Mobility Fellow, Sao Paulo
2011	Guest Scientist, Max Planck Institute of Molecular Plant Physiology, Potsdam-Golm, Germany
2010-present	Distinguished Professor, Department of Plant Biology, Rutgers University
2009-2014	Adjunct Professor, School of Environment and Energy, Graduate School of Peking University in Shenzhen, Shenzhen, China
2008-10	Director, Biotechnology Center for Agriculture and the Environment, Rutgers
2000-10	Professor, Department of Plant Biology and Pathology, Rutgers University
2002-04	Department Head for Botany, The University of Hong Kong
2001-04	Chair of Botany, The University of Hong Kong, Hong Kong SAR of China
1997-98	Instructor for Cold Spring Harbor course on Arabidopsis Molecular Genetics
1995-00	Associate Professor, Department of Plant Science, Rutgers University
1989-95	Assistant Professor, Department of Plant Science, Rutgers University
1982-84	Research Assistant, Division of Molecular Plant Biology, UC Berkeley
1982	Teaching Assistant, Department of Physiology-Anatomy, UC Berkeley
1981	Teaching Assistant, Department of Biophysics, UC Berkeley

C. PRODUCTS

i. RESEARCH PRODUCTS: Duckweed Genomics and Biology

1. "Comprehensive definition of genome features in *Spirodela polyrhiza* by high-depth physical mapping and short-read DNA sequencing strategies" (2017) Todd P. Michael, Douglas Bryant, Ryan Gutierrez, Nikolai Borisjuk, Philomena Chu, Hanzhong Zhang, Jing Xia, Junfei Zhou, Hai Peng, Moaine El Baidouri, Boudewijn ten Hallers, Alex R. Hastie, Tiffang Liang, Kenneth Acosta, Sarah Gilbert, Connor McEntee, Scott A. Jackson, Todd C. Mockler, Weixiong Zhang, and Eric Lam, **The Plant Journal** 89, 617-635. doi: 10.1111/tpj.13400
2. "Natural variance in salt tolerance and induction of starch accumulation in duckweeds" (2015) K. Sowjanya Sree, Kai Adelman, Cyrus Garcia, Eric Lam and Klaus J. Appenroth, **Planta** 241, 1395-1404.
3. "Resurgence of duckweed research and applications: report from the 3rd International Duckweed Conference" (2015) K.J. Appenroth, K.S. Sree, T. Fakhoorian and Eric Lam, **Plant Molecular Biology** 89, 647-654.
4. "Assessment, validation and deployment strategy of a two-barcode protocol for facile genotyping of duckweed species" (2015) Nikolai Borisjuk, Philomena Chu, Ryan Gutierrez, Hanzhong Zhang, Kenny Acosta, Nikolai Friesen, Sowjanya Sree, Cyrus Garcia, Klaus-J. Appenroth and Eric Lam, **Plant Biol (Stuttg)** 17, Suppl. 1, 42-49.
5. "Duckweed in bloom: the 2nd International Conference on Duckweed Research and Applications heralds the return of a plant model for plant biology" (2014) Eric Lam, Klaus-J. Appenroth, Todd Michael, Kazuhiro Mori and Tamra Fakhoorian, **Plant Molecular Biology** 84, 737-742.

ii. OTHER SIGNIFICANT PUBLICATIONS: PCD and Epigenetics

1. "Expression of *Arabidopsis Bax Inhibitor-1* in transgenic sugarcane confers drought tolerance" (2016) Daniel Alves Ramiro, Danila Montewka Melotto-Passarin, Mariana de Almeida Barbosa, Flavio dos Santos, Eric Lam and Helaine Carrer, **Plant Biotechnology Journal**, doi: 10.1111/pbi.12538, 1-12.
2. "The chromatin landscape of the moss *Physcomitrella patens* and its dynamics during development and drought stress" (2014) Thomas Widiez, Aikaterini Symeonidi, Chongyuan Luo, Eric Lam, Michael Lawton and Stefan A. Rensing, **The Plant J.** 79, 67-81.
3. "Regulating the Reapers – Activating metacaspases for programmed cell death" (2012) Eric Lam and Yi Zhang, **Trends in Plant Science** 17, 487-494.
4. "Arabidopsis Metacaspase 2d is a positive mediator of cell death induced during biotic and abiotic stresses" (2011) Naohide Watanabe and Eric Lam, **The Plant Journal** 66, 969-982.
5. "Calcium-dependent activation and autolysis of Arabidopsis metacaspase 2d" (2011) Naohide Watanabe and Eric Lam, **J. Biol. Chem.** 286, 10027-10040.

D. SYNERGISTIC ACTIVITIES

1. Editorial service to the community: *Plant Molecular Biology* (Co-editor since 1996)
2. Meeting Organizer for "The second international conference on Duckweed research and applications" (August 2013, Rutgers University, NJ; Chair, organizing committee)
3. Education program development: my lab has carried out research and educational efforts in the area of renewable fuels research. I was the PI for an NSF-IGERT training grant for renewable and sustainable fuel solutions that has been awarded by the NSF with over 40 participants across the Rutgers campus, as well as international collaborators from Brazil, China and South Africa.
4. *Ad hoc* and grant panel reviewer for the NSF.
5. 2014-2015 awarded a Fulbright-Brazil Scientific Mobility Program Fellow to establish collaborative research with laboratories in the University of Sao Paulo, Brazil.