

NSF BIOGRAPHICAL SKETCH – HUYEN BUI

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(a) Professional Preparation

INSTITUTION	LOCATION	MAJOR/AREA	DEGREE	YEAR
Ho Chi Minh City University of Technology	Ho Chi Minh City, Viet Nam	Chemical Engineering	B.Eng	2005
University of Utah	Salt Lake City, UT, USA	Biochemistry	Ph.D.	2013
Cold Spring Harbor Laboratory	Cold Spring Harbor, NY, USA	Plant Genetics	Postdoctoral Fellow	2013-2015
University of Utah	Salt Lake City, UT, USA	Genomics and Bioinformatics	Postdoctoral Fellow	2015-2019

(b) Appointments

2021- Assistant Research Professor, Center for Biofilm Engineering, Montana State University, Bozeman, MT

2019-2021 Research Scientist, Center for Biofilm Engineering, Montana State University, Bozeman, MT

2015-2019 Postdoctoral Fellow, Department of Biology, University of Utah, Salt Lake City, UT

2013-2014 Postdoctoral Fellow, Cold Spring Harbor Laboratory, Cold Spring Harbor, NY

2006-2013 Research Assistant, University of Utah, Salt Lake City, UT

2005-2006 Lecturer, Chemical Engineering Department, Ho Chi Minh City University of Technology, Ho Chi Minh City, Vietnam

(c) Products

(i) Most closely related to the proposed project:

Bui, H.T., Greenhalgh, R., Gill, G.S., Ji, M., Kurlovs, A.H., Ronnow, C., Lee, S., Ramirez, R.A., Clark, R.M., 2021. Maize inbred line B96 is the source of large-effect loci for resistance to generalist but not specialist spider mites. *Front Plant Sci.* 12:1207.

Gill, S.G., **Bui, H.T.**, Clark, R.M., Ramirez R.A., 2020. Varying responses to combined water stress and herbivory in maize for spider mite species that differ in host specialization. *Environ. Exp. Bot.*, 177:104131.

Kitagawa M., Balkunde R., **Bui H.T.**, Jackson D., 2019. An aminoacyl tRNA synthetase, OK11, is required for proper shoot meristem size in arabidopsis. *Plant Cell Physiol.* 60(11):2597-2608.

Bui H.T., Greenhalgh R., Ruckert A., Gill G.S., Lee S., Ramirez R.A., Clark R.M., 2018. Generalist and specialist mite herbivores induce similar defense responses in maize and barley but differ in susceptibility to benzoxazinoids. *Front Plant Sci.* 9:1222. PubMed PMID: 30186298; (PMC6110934).

Yang, F., **Bui, H.T.**, Pautler, M., Llaca, V., Johnston, R., Lee, B.H., Kolbe, A., Sakai, H., Jackson, D., 2015. A maize glutaredoxin gene, *ABPHYL2*, regulates shoot meristem size and phyllotaxy. *Plant Cell* 27:121-31. (PMID: 25616873).

(ii) Five other significant products:

Bui, H.T., Balkunde, R., Jackson, D., 2015. Plasmodesmata. The Plant Sciences -- Cell Biology. Springer.

Bui, H.T. and Shaw, J.M. 2013. Dynamin assembly strategies and adaptor proteins in mitochondrial fission. **Current Biology** 23: pR891–R899.

Bui, H.T., Karren, M.A., Bhar, D., Shaw, J.M. 2012. A novel motif in the yeast mitochondrial dynamin Dnm1 is essential for adaptor binding and membrane recruitment. **Journal of Cell Biology** 199: 613-622.

Koirala, S., **Bui, H.T.**, Schubert, H.L., Eckert, D.M., Hill, C.P., Kay, M.S., and Shaw, J.M. 2010. Molecular architecture of a dynamin adaptor: implications for assembly of mitochondrial fission complexes. **Journal of Cell Biology** 191: 1127–1139.

Koirala, S., Guo, Q., Kalia, R., **Bui, H.T.**, Eckert, D.M., Frost, A., Shaw, J.M. 2013. Interchangeable adaptors regulate mitochondrial dynamin assembly for membrane scission. **PNAS** 110: E1342-51

(d) Synergistic Activities

1. Mentored 15 undergraduate and high school students. One high school student (Emily Gan) became a finalist in the Regeneron STS Top 300 Scholar competition (\$4000), two undergraduates went on to pursue PhD degree (Sarah Lee, Olivia Kosterlitz).

2. Student representative, Admission Committee for the Bioscience PhD program (University of Utah), 2008-2010: Helped select and recruit 50 PhD students.

3. Presented at various international conferences.