

**ANALYSIS OF THE MOLECULAR MECHANISM OF
AUTOPHAGOSOME FORMATION IN
*SACCHAROMYCES CEREVISIAE***

by

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**A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy
(Molecular, Cellular, and Developmental Biology)
in The University of Michigan
2009**

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DEDICATION

This thesis is dedicated to all the people who have helped and supported me during my pursuit of an academic degree through the years: to my parents and grandparents, for their unconditional love and support, to my teachers for teaching and training me, and to TC, for his encouragement and unquestioned love, for being my best friend, husband, and family. Without your support, I would not have made it this far. Finally, to the luck that let me have all these people in my life.

ACKNOWLEDGEMENTS

I would like to thank my mentor, Dr. Daniel J. Klionsky, for giving me invaluable guidance and training. I have learned a lot from his research expertise, his enthusiasm toward science and education, critical thinking, and extraordinary patience and openness. I would also like to thank my thesis committee members, Dr. Lois S. Weisman, Dr. Anuj Kumar and Dr. Yanzhuang Wang, for their insightful suggestions as well as persistent encouragement toward my research.

It has been wonderful to work together with all the former and current members of the Klionsky lab. I would like to thank Dr. Katy Tucker for her help and training during my rotation. My research projects were carried out with the collaborative efforts of many past and current members of the Klionsky lab. I would like to thank them all for their discussion, ideas, and generous assistance whenever I encountered problems in my experiments. I am especially grateful to have Dr. Ju Huang, Dr. Usha Nair, Dr. Congcong He, Dr. Tomotake Kanki, and Zhifen Yang as passionate colleagues and good friends. Special thanks are due to my undergrad supervisors, Dr. Sheng-Ping Huang at Academia Sinica and Dr. Jenn-Kan Lu for showing me what research is about and how fascinating it is.

I am also grateful to Dr. John Kuwada and Dr. Amy Chang for giving me the opportunity to do rotations in their labs. Final thanks go to the Rackham Graduate School at the University of Michigan, and the MCDB department for supporting me financially and providing me a research opportunity in completing my PhD study.

Chapter 1 is reprinted from *Physiology*, 2009, Volume 23, Wei-Lien Yen and Daniel J. Klionsky. How to Live Long and Prosper: Autophagy, Mitochondria, and Aging, pg.248-262, Copyright (2008), with the permission of *Physiology*.

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Chapter 3 is reprinted from *Autophagy*, Volume 3, Julie E. Legakis, Wei-Lien Yen and Daniel J. Klionsky. A Cycling Protein Complex Required for Selective Autophagy, pg. 422-432, Copyright (2007), with the permission. I performed experiments in Fig. 3.1, Fig. 3.4D, Fig. 3.5, and Table 3.2 yeast two-hybrid analysis of Atg27 interactions. Dr. Julie E. Legakis contributed the rest of the figures.

Chapter 4 is a manuscript prepared for *Journal of Cell Biology*, 2009, Wei-Lien Yen, Takahiro Shintani, Cao Yang, Brian C. Richardson, Zhijian Li, Frederick M. Hughson, Misuzu Baba, and Daniel J. Klionsky. The Conserved Oligomeric Golgi complex functions as a tethering factor in autophagy. Dr. Takahiro Shintani contributed Fig. 4.1A, 4.1B, 4.1C, 4.1E. Dr. Yang Cao performed the experiments in Fig. 4.2. Dr. Frederick M. Hughson, Dr. Brian C. Richardson, and Zhijian Li provided yeast strains for

autophagy phenotypic analysis. Dr. Misuzu Baba performed the experiments in Fig. 4.3C.

I contributed the rest of the data.

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