

Model Organism (e.g. mouse, flies)	Category (disease, proteostasis sensor, PQC pathway component, other)	Genetic Description of Model	Genetic Background (if relevant)	Reference	Investigator Contact Information
Mouse	AD model	B6.CgTg(APP ^{SwFLon} ,PSEN1 ^{*M146L*L286V}) 6799Vas/Mmjax "5XFAD" transgenic mice overexpress both mutant human APP(695) with the Swedish (K670N, M671L), Florida (I716V), and London (V717I) Familial Alzheimer's Disease (FAD) mutations and human PS1 harboring two FAD mutations, M146L and L286V. Expression of both transgenes is regulated by neural-specific elements of the mouse Thy1 promoter to drive overexpression in the brain.	C57Bl/6	Oakley H. et al, J Neurosci 2006 Oct 4;26(40):10129-40 (Medline PMID: 17021169)	murphyg@umich.edu
Mouse	ER-Golgi secretory pthwy	SEC23A knockout	C57BL/6J		ginsburg@umich.edu
Mouse	ER-Golgi secretory pthwy	SEC23B knockout	C57BL/6J	Tao, J., et al. (2012). "SEC23B is required for the maintenance of murine professional secretory tissues." Proc.Natl.Acad. Sci.U.S.A 109(29): E2001-2009.	ginsburg@umich.edu
Mouse	ER-Golgi secretory pthwy	SEC24A knockout	C57BL/6J	Chen, X. W., et al. (2013). "SEC24A deficiency lowers plasma cholesterol through reduced PCSK9 secretion." eLife 2: e00444.	ginsburg@umich.edu
Mouse	ER-Golgi secretory pthwy	SEC24B knockout	C57BL/6J		ginsburg@umich.edu
Mouse	ER-Golgi secretory pthwy	SEC24C knockout	C57BL/6J		ginsburg@umich.edu

Mouse	ER-Golgi secretory pthwy	SEC24D knockout	C57BL/6J	Baines, A. C., et al. (2013). "Disruption of the Sec24d gene results in early embryonic lethality in the mouse." PloS one 8(4): e61114.	ginsburg@umich.edu
Mouse	ER-Golgi secretory pthwy	SAR1A knockout	C57BL/6J		ginsburg@umich.edu
Mouse	ER-Golgi secretory pthwy	SAR1B knockout	C57BL/6J		ginsburg@umich.edu
Mouse	ER-Golgi secretory pthwy	LMAN1 knockout	C57BL/6J	Zhang, B., et al. (2011). "Mice deficient in LMAN1 exhibit FV and FVIII deficiencies and liver accumulation of {alpha}1-antitrypsin." Blood 118(12): 3384-3391.	ginsburg@umich.edu
Mouse	ER-Golgi secretory pthwy	MCFD2 knockout	C57BL/6J		ginsburg@umich.edu
Mouse	Disease	Npc1 floxed exon 9 (conditional null)	C57BL6/J	Hum Mol Genet, 19:837-847, 2010	liebermn@umich.edu
Mouse	Disease	AR113Q knockin	C57BL6/J	J Clin Invest, 116:2663-2672, 2006	liebermn@umich.edu
Mouse	Diabetes	Tg model of misfolded Akita proinsulin	B6		parvan@umich.edu
Mouse	Diabetes	Akita mouse	B6		parvan@umich.edu
Mouse	Hypothyroidism	Tg model of misfolded thyroglobulin	B6		parvan@umich.edu

Mouse	Hypothyroidism	Cog/cog model of misfolded thyroglobulin	B6		parvan@umich.edu
Mouse	Disease (Parkinson disease)	Knockout of alpha-synuclein	C57Bl6/129	Dauer et al. PNAS 2002	dauer@umich.edu
Mouse	Disease (Parkinson disease)	Knockout of Atp13a2	C57Bl6/129		dauer@umich.edu
Mouse	Disease (Dystonia)	Knockout of TorsinA	C57Bl6/129	Goodchild, Kim, Dauer. Neuron 2005	dauer@umich.edu
Mouse	SCF E3 ligase component	Sag (Rbx2/Roc2/Rfn7) transgenic mouse driven by K14 promoter	FVB/N	Gu, Q., et al. J Cell Biol. 2007	sunyi@umich.edu
Mouse	SCF E3 ligase component	Gene trap mouse for Sag—Die at E11.5	Sv129/B6	Tan, M., Zhao, Y., et al Dev Cell 2011	sunyi@umich.edu
Mouse	SCF E3 ligase component	Gene trap mouse for Roc1 (Rbx1)—die at E6.5	Sv129/B6	Tan, M., et al, PNAS 2009	sunyi@umich.edu
Mouse	SCF E3 ligase component	Conditional KO mouse for Sag	Sv129/B6 or pure B6	Li, H., Tan, M., et al J Clin Invest. 2014 Tan, M., Li, H., et al Oncogene 2013	sunyi@umich.edu
Mouse	SCF E3 ligase component	Sag-Cre transgenic mice driven by p48 promoter	Sv129/B6		sunyi@umich.edu