

## Masaaki Komatsu, Ph.D.

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| 1995         | B.A., Meiji University, Japan  |
| 1997         | M.S., University of Tsukuba, Japan   |
| 2001         | Ph.D., Juntendo University School of Medicine, Japan                           |
| 2001-2002    | Postdoctoral Fellow, Juntendo University School of Medicine, Japan             |
| 2002-2004    | Postdoctoral Fellow, Tokyo Metropolitan Institute of Medical Science, Japan    |
| 2004-2007    | Assistant professor, Juntendo University School of Medicine, Japan             |
| 2007-2008    | Associate professor, Juntendo University School of Medicine, Japan             |
| 2008-2010    | Principle Investigator, Tokyo Metropolitan Institute of Medical Science, Japan |
| 2010- 2014   | Project Leader, Tokyo Metropolitan Institute of Medical Science, Japan         |
| 2014-present | Professor, School of Medicine, Niigata University, Japan                       |

### **Specialty & Research Field of Interest**

Biochemistry, Cell Biology, Protein Metabolism, Autophagy

### **Selected Publications**

1. Ichimura, Y. et al. Phosphorylation of p62 activates the Keap1-Nrf2 pathway during selective autophagy. **Mol Cell** 51: 618 (2013)
2. \*Mizushima, N. & \*Komatsu, M. Autophagy: renovation of cells and tissues. **Cell** 147: 728 (2011)
3. \*\*Takamura, A., \*\*Komatsu, M., et al. Autophagy-deficient mice develop multiple liver tumors. **Genes Dev** 25: 795 (2011) \*\* equal contribution.
4. Inami, Y., et al. Persistent activation of Nrf2 through p62 in hepatocellular carcinoma cells. **J Cell Biol** 193: 275 (2011)
5. \*Komatsu, M., et al. The selective autophagy substrate p62 activates the stress responsive transcription factor Nrf2 through inactivation of Keap1. **Nat Cell Biol** 12: 213 (2010)
6. Ichimura, Y., et al. Structural basis for sorting mechanism of p62 in selective autophagy. **J Biol Chem** 283: 22847 (2008)
7. Komatsu, M., et al. Homeostatic levels of p62 control cytoplasmic inclusion body formation in autophagy-deficient mice. **Cell** 131: 1149 (2007)
8. Komatsu, M., et al. Essential role for autophagy protein Atg7 in the maintenance of axonal homeostasis and the prevention of axonal degeneration. **Proc Natl Acad Sci U S A** 104: 14489 (2007)
9. Komatsu, M., et al. Loss of autophagy in the central nervous system causes neurodegeneration in mice. **Nature** 441: 880 (2006)
10. Komatsu, M., et al. Impairment of starvation-induced and constitutive autophagy in Atg7-deficient mice. **J Cell Biol** 169: 425 (2005)