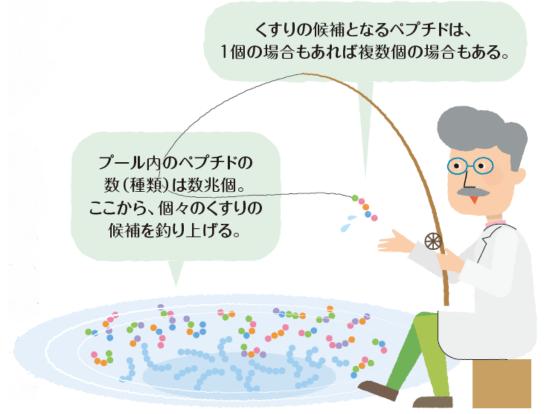


# MeSCue-Janusys Inc.

### Our Patented Technology

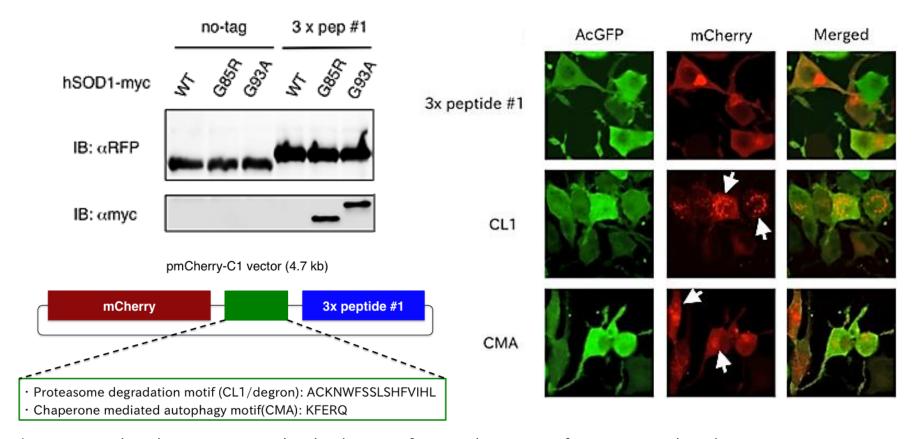
Powerful technology for screening of a very large (1~10 trillion ) peptide molecules and discovery of various target specific peptide leads





### Therapeutic Approach for the Treatment of ALS

Mutant SOD1 is considering as one of the most common causes of ALS by misfolding and aggregation. Hence, specific inhibition of SOD1 aggregation may lead to the development of novel therapy for ALS.



<sup>\*</sup>Joint research with Dr. Koji Yamanaka, the director of Research Institute of Environmental Medicine, Nagoya University (it belonged to RIKEN at that time)

Successfully we could obtain a peptide that specifically binds to mutant SOD1 and inhibit its aggregation.



# <u>Challenges and Solutions for the Development</u> <u>of ALS Therapy</u>

#### 1- Identification of effective molecular targets for ALS treatment

- Elucidation of ALS underlying mechanism and identification of causative substances
- Targets related to both sporadic and hereditary ALS (Example: TDP-43)
- Rapid obtaining of peptide-based drug candidates (takes around 3-6 months) for various specific targets

#### 2- Peptide DDS to reach CNS

- Fusion with a cell-penetrating peptide
- Intracellular expression by gene transfer
- Development of innovative therapies by the utilization of peptide characteristics