

学位論文題名 Elucidating the molecular basis of age-related changes in metabolism, mobility, and learning ability using small teleost fish
(小型魚類を用いた加齢に伴う代謝・運動機能・学習能変化の分子基盤の解明)

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【論文要約】

The population ratio of over 65 years old is increasing globally, and the increment of patients with age-related diseases is one of the most severe problems in society. However, the molecular mechanism of age-related diseases is unclear. We aimed to find common aging factors among species.

First, we compared the age-related changes in guppy to mammals and zebrafish and found conserved and different age-related genes among them. Then, we focused on *igf2bp3* extracted by transcriptome analysis. We examined if *igf2bp3* contributes to aging phenotypes and found that *igf2bp3*KO zebrafish showed premature aging phenotypes. Our data suggested that *igf2bp3* might play important roles in aging pathology.