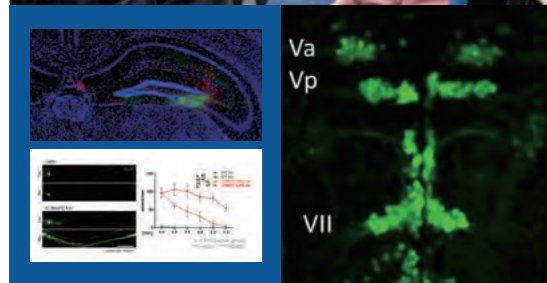
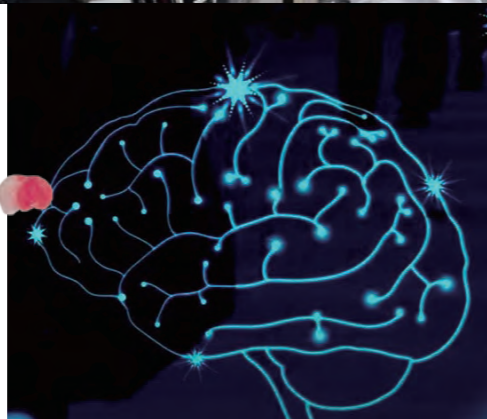


CUTTING EDGE LAB 03



Department of Life Science and Medical Bioscience, Advanced Science and Engineering

Toshio Ohshima Laboratory

Exploring molecular mechanisms of brain development and regeneration to treat neuropsychiatric disorders

Professor OHSHIMA, Toshio

Brain science is an extremely attractive field in life science because of the many mysteries that have yet to be solved. At the same time, expectations are high for the findings of brain science to lead to the understanding and treatment of pathological conditions of neuropsychiatric disorders. At the Ohshima Laboratory, we are involved in brain science research on the molecular level by using mice and zebrafish as model animals. Based on the findings in our research on neural development, we are developing methods to be applied to neuronal regeneration, and our recent focus has been on Collapsin Response Mediator Proteins, and we have been studying them in genetically modified mice and knockout zebrafish made with CRISPR/Cas9. From these findings,

we are conducting research to be applied to the development of therapeutic methods for neurological disorders. Many of our students are from overseas and nearly half of our graduate students are international students. Through discussions conducted in English, we provide an environment where the Japanese students can improve their English proficiency as well as nurture an international research mentality. The Ohshima Laboratory and the Department of Life Science and Medical Bioscience as a whole are making efforts to nurture world-class researchers through programs in which students can acquire research experience at universities and research organizations both in Japan and abroad.



Profile

M.D., Ph.D. (Yamanashi Medical University). After working as a researcher in NINDS, NIH (USA) and RIKEN BSI, he was appointed to current position in 2007.

[Research Areas]

Molecular brain science
Neuroscience-general

[Research Topics]

Molecular mechanisms of brain development and regeneration

Voice



GUO, Youjia

[China]
Doctoral Program 2nd Year
Department of Life Science
and Medical Bioscience
(Graduated from Johns
Hopkins University)

Welcome to join the Ohshima Lab! I am pleased to tell you that joining our team, you will not only engage in hands-on investigations, you will also go on an enjoyable and memorable journey of your life. We believe that Ohshima lab is your second home in Waseda University as you will always be surrounded by support from all of our lab members and of course from our great professor. You will have a lot to discover, and we hope that you can achieve your highest potential here in Ohshima Lab. Together, we can promote the lab climate as respectful, supportive, and most importantly, nice and warm! We look forward to having you here in our big family.