

Public Abstract

First Name:Anagha

Middle Name:Shashikant

Last Name:Sawant

Adviser's First Name:Anand

Adviser's Last Name:Chandrasekhar

Co-Adviser's First Name:

Co-Adviser's Last Name:

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Title:CELLULAR BEHAVIORS REGULATING THE TANGENTIAL MIGRATION OF FACIAL BRANCHIOMOTOR NEURONS IN THE ZEBRAFISH EMBRYO

Development of the nervous system involves range of complex processes. One of these important processes is migration of newly born neurons to their destination in other parts of the brain. These neurons travel considerable distances by following cues and signals from other neurons and from the extracellular environment. Defects in the migration can result in physical abnormalities including seizures, motor dysfunction and mental retardation. We show here that several proteins interact with each other and are essential for the migration of specific subset of neurons in the hindbrain of the zebrafish embryo. With the help of time lapse imaging, we show that these neurons require expression of certain proteins such Tag1, Lama1 and Stbm to give specific directionality to the migration.