Wnt signaling is known to be involved in retina regeneration but its importance in fin regeneration has not been studied yet. LiCl is a positive regulator of Wnt signaling pathway by inhibiting GSK3β. So, we studied the effect of LiCl on zebrafish caudal fin regeneration and we found that LiCl acts a positive regulator of caudal fin regeneration by upregulatingWnt signaling pathway as blastema regeneration has increased from 125μM to 500μM. Along with this, we studied the effect of tumour suppressor gene Ptenb inhibitor and EDTA on fin regeneration and we found that both of these downregulates fin regeneration whereas HDACs inhibitor, LiCl and CaCl2 upregulates fin regeneration. Then, we studied the effect of Lithium ions on embryos which revealed that embryos showed delayed hatching at 8dpf in the presence of Li ions as compared to the control as Lithium upregulates Wnt signaling which further downregulates hyaluronidase enzyme due to which chorion does not break down. Then, we studied about pluripotency factors where there is induction of pluripotency factors during retina regeneration, embryonic development and fin regeneration. mRNA in situ hybridization of pluripotency factors revealed their spatial expression pattern at different time points during embryonic development. Finally, we did immunostaining where it has been shown that notch inhibitor causes induction of sox2 during proliferation of astrocytes in mice retina and DAPT enhances proliferation of cells