BIO 365N. Development and Plasticity of the Nervous System.

An introduction to the principles by which the neural tube (brain and spinal cord) develops during embryogenesis, including regionalization of the brain into forebrain, midbrain, hindbrain, and spinal cord. Particular emphasis will be given to the mechanisms that govern how neurons acquire their identity and form neuronal circuits and synapses. Developmental and congenital diseases and possible therapies, including stem cell based therapy or gene therapy. Three lecture hours a week for one semester. Prerequisite: Biology 349 with a grade of at least C-, and Biology 365R or 371M with a grade of at least C-.