Neurodevelopmental disorders are a group of disorders in which the development of the central nervous system is disturbed. Genetic data, functional MRI studies and the identification of specific brain circuitries involved suggest a model in which certain areas of the brain are partially disconnected during development. This concept of developmental disconnection might indeed contribute to the specific neurobehavioral features that are observed in autism spectrum disorder, schizophrenia and other intellectual disabilities. Neurodevelopmental disorders are characterized by impaired communication, impaired reciprocal social interaction, inability for adaptive behavior and restricted, repetitive and stereotyped patterns of behaviors or interests. The PhD student will develop a project aiming at characterizing the impact of specific brain circuitries on social behavior in mouse models of ASD. The project will develop partially based on our recent work by Dominguez et al. 2019 (Nat. Commun. 2019. 10: 3454). The candidate PhD student will become familiar with diversified scientific approaches that include standard techniques of molecular neuroscience, in vivo imaging and rodent behavior and data analysis.